

REF SITIS 15 AGES 1907/13

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Year

1907

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY OF ONTARIO

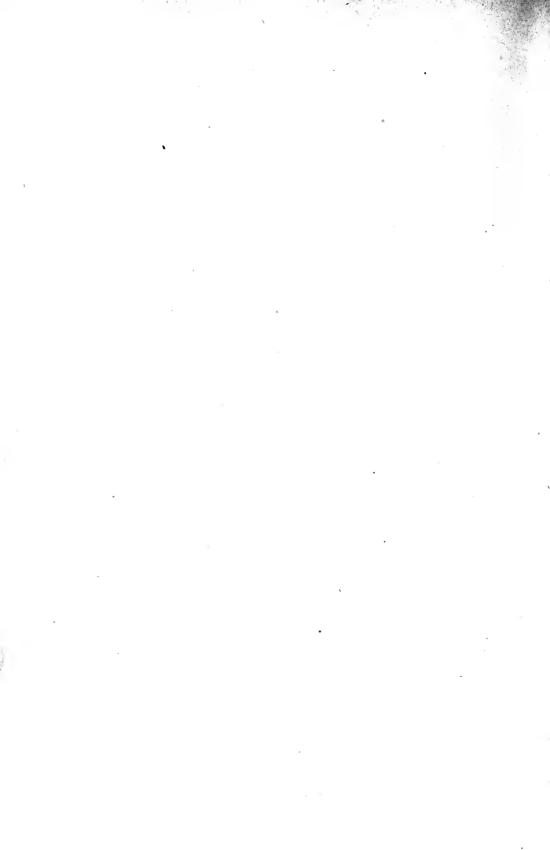


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Report of the

Minister of Lands, Forests and Mines

Of the Province of Ontario, for the Year 1907.

To His Honour SIR WILLIAM MORTIMER CLARK, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by law, I submit for the information of your Honour and the Legislative Assembly, a report for the year ending on the 31st December, 1907, of the management of the Crown Lands of the Province.

CLERGY LANDS.

The area of Clergy lands sold during the year was 82 3-5 acres, aggregating in value \$95.00. The collection on account of these and former sales amounted to \$2,304.89. (See Appendix No. 3, page 6.)

COMMON SCHOOL LANDS.

The area of Common School lands sold during the year was 12 2-5 acres for \$33.00. The collection on account of these and sales of former years was \$13,959.78. (See Appendix, No. 3, page 6.)

GRAMMAR SCHOOL LANDS.

The area of these lands sold during the year was 91 7-10 acres, for \$295.40. The collection on account of these and sales in former years was \$1,774.50. (See Appendix No. 3, page 6.)

UNIVERSITY LANDS.

The area of these lands sold during the year was 1,739½ acres, for \$869.76. The collection on account of these and sales of former years was \$1,397.03. (See Appendix No. 3, page 6.)

CROWN LANDS.

There have been sold for agricultural purposes during the year 79,418, 5-10 acres for \$64,225.89. The collection on account of these and former sales was \$69,584.57. There were sold for mining purposes 9,309 3-5 acres for \$1,288,705.75 and collected on account of mining sales \$1,184,719.06. Of this \$1,155,000.00 was on account of the portions of Cobalt and Kerr Lakes, which were sold by public tender.

There were leased for mining purposes 8,194 1-10 acres for \$8,088.12. There was collected on account of mining leases \$21,563.16. There were

3,807 4-5 acres of Crown lands leased for other than mining purposes. The collection on account of these and former leases was \$3,716.31. The total area of land disposed of during the year was 102,656 7-10 acres. The total collections on account of lands sold and leased during the year was \$1,299,019.30. (See Appendix No. 3, page 6.)

MILITARY GRANTS.

There were 550 certificates issued during the year, authorizing veterans to select their lands, under 1 Edward VII., Cap. 6. This brings the total number issued under this legislation up to 13,550. Location certificates, confirming veterans in the lands selected upon prescribed conditions, were issued to 825, making a total of 3.727. Eight hundred and seventy-five locations were made during the year, nearly all in the District of Algoma, north of the height of land, bringing the number of locations up to 6,095. As already stated 13,550 certificates have been issued and there are in the Department new applications for certificates to the number of 50. Under the amendment to the Act, 1,025 unlocated military certificates have been surrendered to the Crown for the \$50.00 commutation money, making a total of 2,425 disposed of in this way. Patents have issued to 1,044, making a total of 1,305 patents issued to date. (See appendix No. 11, page 44.)

MINING INDUSTRY.

The output of the mines and mineral works of Ontario for 1907 was of greater aggregate value than in any previous year—exceeding the output of 1906 by \$2,618,109. The largest item in the total of \$25,006,492 was the production of silver, of which the mines of the Cobalt camp yielded 10,028,259 ounces valued at \$6,157,871. This rich region has made a rapid development, the first production, 206,875 ounces, being in the year 1904. quantity of silver produced at Cobalt mines up to the end of 1907 was 18,088. 256 ounces, valued at \$11,297,812. The shipments of ore to the same date amounted to 22,446 tons, so that the average contents of silver were 806 ounces per ton, worth \$503. The principal mines are the Nipissing, O'Brien, Coniagas, La Rose, Kerr Lake, Buffalo, McKinley-Darragh-Savage, Trethewey, Temiscamingue, Right-of-Way, Drummond, Cobalt Silver Queen, Temiskaming and Hudson Bay, Foster, and Nova Scotia. For the most part the ore is purchased by smelting establishments in the United States, but there are two refineries now in operation in Ontario, one at Copper Cliff owned by the Orford Copper Company, and the other at Deloro, by the Deloro Mining and Reduction Company. Several other refineries are also in course of erection, and concentrating plants are being added by a number of the mines to treat their low-grade ores.

Ores similar to those of Cobalt have been found on the Montreal River, 35 or 40 miles northwest of Cobalt, and more recently on the shores of Lake Temiskaming, about 22 miles southeast of Cobalt. Ontario is now producing

one-eighteenth of the total silver production of the world.

Next in importance to silver is nickel, the chief source of which is the Sudbury district. The output of nickel last year was 10,972 tons, having a value in the matte of \$2,271.616. Accompanying the nickel was copper to the extent of 7,373 tons, worth \$1,045,511. From the iron mines of the Province were raised 205,295 tons of ore, valued at \$482,532. Fuller particulars of the mineral production of the Province are given in the report of the Bureau of Mines.

A remarkable feature of the year was the large amount received for sales of mining land, \$1,184,719.06. A very large part of this sum was received on account of the sale of parts of the beds of Cobalt and Kerr lakes. The total revenue from mining sources was \$1,731,720.72.

Collections.

The total collection of the Department from all sources was \$3,068,494.09. Of this amount \$1,184,719.06 was derived from mining lands; \$207,945.06 from royalties; \$1,219,051.32 from woods and forests; \$43,453.35 from supplementary revenue; \$137,768.40 from mining licenses and \$134,628.73 recording fees. (See Appendix No. 4, page 7.)

DISBURSEMENTS.

The gross expenditure of the Department for all services during the year was \$660,556.33. The principal services were: agents' salaries and disbursements, \$49,316.98; forest ranging, \$64,887.97; fire ranging, \$97,-234.51; mining development, \$60,685.95; forest reserves, \$41,884.72; surveys, \$162,479.91; veterans' commutation, \$46,850; Gillies limit, \$30,686.60; refunds, \$23,621.06; Parks, \$14,675.42; contingencies, \$29,671.71. (See Appendix No. 6, page 9 to 39.)

WOODS AND FORESTS.

The total revenue from Woods and Forests was \$1,219,051.32, consisting of bonus, \$152,222.24; timber dues, \$998,863.15; ground rent, \$65,-

084.38; transfer fees, \$2,879.85. (See Appendix No. 4, page 7.)

The financial stringency that prevailed last year was severely felt by the lumber trade. It was difficult to make collections. The banks adopted a restrictive policy and would not make advances, except such as were absolutely necessary to keep organizations together, and tide operators along until conditions improved. Under these circumstances, it became impossible for the licensees to pay their indebtedness to the Department for timber dues, etc., before the end of the year. As there was plenty of security for the indebtedness in the shape of limits, logs and lumber, on which the Department has the first lien, and to insist upon payment would have ruined many and demoralized the trade, it was considered prudent to carry them for the payment of balances due. Accordingly, those who were unable to pay their indebtedness were given extensions of time in whole or in part, and thus a crisis was avoided. In consequence of this action there is about \$500,000 revenue of 1907 uncollected, which will come in, however, during 1908. The stringency which prevailed became more severe towards the end of the year, causing curtailment of operations in the woods, and consequently the output of logs will be smaller in volume than that of last year.

FIRE RANGING.

There were 623 fire rangers on duty during the past summer, including those in the forest reserves. Of this number 360 were employed on licensed lands, half of their wages being paid by the licensees and the other half by the Crown. Along the line of construction of the Canadian Northern, the T. & N. O. Ry., the Grand Trunk Pacific and the Canadian Pacific, 103 fire rangers were on duty. The cost of this service was \$38,

110.36, which will be refunded by the railways along whose lines the rangers were employed. In forest reserves there were 109 rangers employed costing \$41,884.72. On lands of the Crown in the Sturgeon Valley and elsewhere 51 rangers were on duty at a cost of \$14,497.36. The total expenditure for fire ranging last year was \$139,119.23. No serious fires were reported.

CULLERS' EXAMINATIONS.

Examinations were held at North Bay, Port Arthur, Sault Ste. Marie, Fort Frances and Kenora. Seventy-six candidates were successful at these examinations, and were granted certificates authorizing them to act as cullers. (For list of Licensed Cullers see Appendix No. 51, page 137.)

ALGONQUIN AND RONDEAU PARKS.

The reports of the Superintendents of these parks will be found in Appendices Nos. 49 and 50, pages 134 and 136.

CROWN SURVEYS.

The following Crown Surveys have been undertaken or concluded this year:—

Instructions for subdivision of twenty-three townships were issued but owing to the remarkably wet summer and fall in the north, only nine townships have been completed in time for this year's report. The names of the townships and the respective districts in which they are situate are as follows:—

District of Algoma,—Barker, Colquhoun, Devitt, Eilber, Godfrey, Jamieson, Jessop, Kendrey, Laidlaw, Leitch, Mabee, Macdiarmid, McCrae, McCowan, Mountjoy, Reaume and Staunton. District of Nipissing,—Bayly, residue of Coleman, Glackmeyer, Hanna, Kennedy, and Purvis. Six hundred and six miles of base and meridian lines have been run during the year, of these, one hundred and twenty miles formed part of the district boundary between Algoma and Thunder Bay, one hundred and eighty miles formed the outlines of nine mile townships in the District of Algoma, west of the Missinabie River, one hundred and fifty-nine and one half miles formed the outlines of six mile townships in the Larder Lake region, in the District of Nipissing; twenty-two and one-half miles of base line north of Lake Abitibi in the District of Nipissing, and one hundred and twenty-four miles of outlines of townships in the Temagami Forest Reserve.

The reports of the surveyors of the base and meridian lines in what may be called the Clay Belt in Northern Ontario, as well as those of the subdivisions into lots and concessions continue to bear out the favorable impression of the adaptability and fertility of the soil for agricultural purposes.

The outlines of the blocks of land set apart in accordance with the provisions of Statutes of Ontario, 4th Edward 7th, Chapter 18, along the Thunder Bay branch of the Grand Trunk Pacific Railway to be granted to the said Grand Trunk Pacific Railway have been nearly all surveyed and defined upon the ground. Three hundred and eighty-nine and one half miles of outlines having been run, leaving one block yet to be surveyed.

A number of Timber Berths in the Districts of Algoma, Nipissing, Rainy River and Thunder Bay have been surveyed during the year.

Several other minor surveys have also been performed.

The surveyors' reports so far as received and examined will be found in appendices 18 to 48 inclusive, pages 55 to 131 inclusive.

MUNICIPAL SURVEYS.

On the petitions of the Municipal Councils of the townships of Garafraxa, Hinchinbrooke, and town of Blind River, instructions have been issued for the survey of the original road allowance between parts of concessions three and four in the township of Garafraxa; for the survey of line between certain lots in the third concession of the township of Hinchinbrooke and for the definition of a block of land in the Town of Blind River.

The Municipal Survey of the road allowance between the rear of lots on the Middle Road, and the third concession, extending from the town line between the townships of Aldborough and Orford northwesterly through part of Orford has been confirmed under the provisions of the Revised Statutes of Ontario, 1897, chapter 181, sections 14 and 15, such survey being final and

conclusive.

The particulars relating to these surveys will be found in appendices Nos. 14 and 15, pages 50 and 51.

MINING AND OTHER SURVEYS.

The Mines Act requires that applicants to purchase or lease mining lands in unsurveyed territory shall file in the Department, surveyor's plans (in triplicate) of their proposed mining locations and mining claims, with field notes and descriptions by metes and bounds, before any sale or lease can be carried out, and under Orders-in-Council, dated 23rd January, 1892; 3rd December 1892; 29th April, 1886; 22nd September, 1893; 26th February, 1906; 2nd October, 1907; 7th November, 1907, applicants to purchase islands, or locations for agricultural purposes in unsurveyed territory, are required to file suveyor's plans (in triplicate) of their locations or islands as the case may be, with field notes and descriptions by metes and bounds; the locations to be of the form and size, wherever practicable, prescribed by the Mines Act, together with the necessary affidavits as to their being no adverse claim by occupation or improvement, etc.

Under the above Act, Orders-in-Council and Regulations, in the districts of Parry Sound, Nipissing, Algoma, Thunder Bay, Rainy River, an area of 15,534 3-10 acres has been sold and patented during the year, for which the sum of \$1,127,393.11 has been received; and an area of 3,527 3-10 acres has

been leased at \$1.00 per acre for the first year's rental.

F. COCHRANE,
Minister.

Department of Lands, Forests and Mines, Toronto, December 31st, 1907.



APPENDICES.

APPENDIX No. 1.

RETURN of Officers and Clerks of the Department of Lands, Forests and Mines for the year 1907.

	Remarks.				- **** . **
	Salary per annum.	6,000 00 3,500 00 1,700 00 1,550 00 650 00 550 00	2,000 00 1,400 00 1,050 00 1,100 00 800 00 750 00 500 00	1,550 00 750 00 550 00	2,400 00 1,900 00 1,150 00 1,300 00 950 00 950 00 550 00 750 00 1,800 00 1,000 00 1,100 00 1,100 00 1,000 00
	When appointed.	1905, May 13 1882, Jan. 1 1872, Feb. 1 1899, Feb. 26 1899, May 1 1905, Jan. 1	1872, May 1	1900, Mar. 2 1904, Jan. 13 1904, Nov. 9	1886, Jan. 30
1	Designation.	Minister Deputy Minister Law Clerk Minister's Secretary Secretary to Department Stenographer	Chief Clerk Clerk do So Stenographer Clerk do Stenographer	Chief Clerk	Director of Surveys. Surveyor and Draughtsman. Clerk Draughtsman Olerk do Draughtsman Stenographer Draughtsman Glerk do Chief Clerk do do do do
	Лате.	Hon. F. Cochrane. Aubrey White. George Kennedy. Geo. W. Yates. E. S. Williamson. Janet Garvie. M. M. McCrea.	J. J. Murphy Walter Cain W. R. Ledger Selby Draper May Bengough W. A. Collins S. A. Platt J. Oram.	R. H. Browne R. T. Winter E. F. O'Neil	Geo. B. Kirkpatrick J. F. Whitson W. F. Lewis. D. G. Boyd. E. M. Jarvis. J. B. Proctor H. Treeby M. H. Kirkland J. H. Patterson G. C. Blanchet. C. S. Jones C. E. Burns. W. S. Sutherland W. S. Sutherland W. Carrell.
	Branch.		Sales and Free Grants	$\text{Military Grants} \bigg\}$	Surveys and

				WHITE, Deputy Minister Lands and Forests.
2,000 00 1,200 00 1,130 00 1,100 00 950 00 850 00 750 00 750 00 550 00	2,100 00 1,200 00 1,150 00 950 00 750 00 1,500 00 1,200 00	3,000 00 750 00 750 00 660 00 950 00 750 00 750 00 550 00	200 00	AUBREY WHITE Deputy
1867, Dec. 1 1891, Nov. 1 1898, Aug. 1 1900, April 9 1903, Jan. 1 1904, Jan. 13 1904, Oct. 2 1905, Oct. 2 1906, Aug. 23 1906, Aug. 23	1861, April 15 1873, Dec. 20 1904, Jan. 13 1905, Oct. 2 1905, Oct. 2 1905, Oct. 2 1880, Mar. 1	1891, June 19 1901, Mar. 1 1906, Jan. 1 1906, Jan. 1 1906, Peb. 27 1906, Aug. 7	1893, Oct. 1	AUB
Chief Clerk do Stenographer	Accountant Clerk do do do do do do Segistrar Clerk	Deputy Minister. Clerk do Stenographer Clerk do do Stenographer	Messenger	
J. A. G. Crozier Kenneth Miller J. B. Cook H. Gillard F. J. Niven W. F. Trivett R. H. Hodgson Jno. Houser Chester Dies A. J. Lamb Florence Lennon	D. George Ross E. Leigh H. M. Lount H. E. Johnston H. G. Harris C J. Clark Frank Yeigh H. Cartwright	Thos. W. Gibson. Anne Moffat. W. H. Morris. Ethel Craig. R. D. Fisher. R. A. Sinclair. D. H. Barr. Flossie McDougall.	H. Brophy	ROSS, Accountant.
Woods and Forests	Accounts	Bureau of Mines		D. GEO. ROSS, Accou

D. GEO. ROSS, Accountant.

APPENDIX No 2.

List of Land Agents and Homestead Inspectors for the Year 1907.

	·
Remarks.	Died 24th May 1907. Resigned 30th Sept. 1907. Died 30th Sept. 1907. Died 2nd July 1907.
Salary per annum.	1,250 00 00 00 00 00 00 00 00 00 00 00 00 0
Date of appointment.	1905, May 31 1907, Oct. 1 1907, Oct. 23 1906, Jan 16 1905, July 28 1905, July 28 1906, July 3 1906, July 3 1906, July 10 1906, July 10 1905, July 8 1906, July 10 1905, July 3 1906, July 3 1906, July 10 1906, July 3 1907, Sept. 8 1907, Sept. 8 1907, Sept. 10 1906, July 3 1906, July 3 1906, July 3 1906, July 1 1906, July 1
District or county.	Part of Hastings and Peterboro do Victoria. Homestead Inspector. Part of District of Rainy River. Homestead Inspector. Part of District of Sudbury. do do Algoma Homestead Inspector. Part of District of Rainy River. Homestead Inspector. Part of District of Rainy River. Homestead Inspector. do County of Peterboro. do District of Parry Sound. do District of Parry Sound. do Victoria. Town plot of Alberta and Part of District of Rainy River. Homestead Inspector. Part of Parry Sound. do Victoria. Town plot of Alberta and Part of District of Rainy River. Homestead Inspector. Part of District of Nipissing. do do Parry Sound. do Abertrew. Sudbury do Abertrew. Bany River. Homestead Inspector. Part of District of Nipissing. do do Parry Sound. do Abertrew.
Post office address.	Tory Hill Minden Fort Frances Fort Frances Fenora. Denbigh Bracebridge. Bracebridge. Bracebridge. Bracebridge. Bracebridge. Massey. Thessalon: Fort Sound Maganetawan Maganetawan New Liskeard Chelmsford Fort Frances Fort Frances Fort William Heaslip Fort William Go. Sturgeon Falls Sudbury Emo Sturgeon Falls
Name.	Anderson, Jno. H. Baker, R. H. Baker, James Belyea, C. W. Both, Chas. Brown, James B. Byers, R. J. Byers, R. J. Burnas, C. W. Campbell, Wm. Chester, Thos. Doacon, John M. Bastland, T. G. Ellis, James. Freeborn, Dr. J. S. Freeborn, Dr. J. S. Groulz, R. J. Handy, E. Hartle, Wm. Hollands, C. J. Hunt, J. H. McK. Hugh, Williams. Heeson, W. H., Keefer, Harold Levis, Jos. A. MacLennan, J. K. MacLennan, J. K. McKeyter, Harold Levis, Jos. A. MacLennan, J. K. McKeyden, Alex, Philion, Jas. A. Powell, Fred. R. Prince, Adam.

AUBREY WHITE, Deputy Minister Lands and Forests.

APPENDIX No. 3.

STATEMENT of Lands Sold and Leased, Amount of Sales and Leases, and Amount of Collections for the year 1907.

Acres sold and leased.	Amount of sales and leases.		Collections on sales and leases		
	\$	c.	\$	c.	
$79,418^{-5}_{10}$	64,225	89	69,584	57	
$9,309\frac{3}{5}$	1,288,705	75	1,184,719	06	
$82\frac{3}{5}$	95	00	2,304	89	
$\boldsymbol{12\tfrac{2}{5}}$	33	00	13,959	78	
$91\frac{7}{10}$	295	40	1,774	50	
$1,739\frac{1}{2}$	869	76	1,397	03	
$8,194\frac{1}{10}$	8,088	12	21,563	16	
$3,807\frac{4}{3}$	333	40	3,716	31	
$102,656_{70}^{-7}$	1,362,646	32	1,299,019	30	
	and leased. $79,418_{10}^{\frac{5}{10}}$ $9,309_{3}^{\frac{3}{5}}$ $82_{3}^{\frac{3}{5}}$ $12_{2}^{\frac{2}{5}}$ $91_{10}^{\frac{7}{0}}$ $1,739_{2}^{\frac{1}{2}}$ $8,194_{10}^{\frac{1}{0}}$ $3,807_{\frac{4}{5}}^{\frac{4}{5}}$	and leased. sales and leased.	and leased. sales and leases.	and leased. sales and leases. sales and leases. $\$$ c. $\$$ $79,418_{10}^{-5}$ $64,225.89$ $69,584$ $9,309_{3}^{-3}$ $1,288,705.75$ $1,184,719$ 82_{3}^{-5} 95.00 $2,304$ 12_{2}^{-5} 33.00 $13,959$ 91_{10}^{-7} 295.40 $1,774$ $1,739_{2}^{-1}$ 869.76 $1,397$ $8,194_{10}^{-1}$ $8,088.12$ $21,563$ $3,807_{3}^{-4}$ 333.40 $3,716$	

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister Lands and Forests.

APPENDIX NO. 4.

STATEMENT of the Revenue of the Department of Lands, Forests and Mines for the year 1907.

			1			
Service.	\$	с.	\$	с.	\$	с.
LAND COLLECTIONS.						
Crown Lands. Agricultural Mining	69,584 1,184,719			69		
Clergy Lands	2,304 13,959 1,774 1,397	$\begin{array}{c} 78 \\ 50 \end{array}$				
Rent. Mining Leases	21,563	16	19,436	20		
Crown Leases	3,716 137,768	31	25,279	47		
Recording Fees	134,628		272,397			
Royalties Supplementary Revenue.		• • •	207,945	06		
Acreage Tax. Profit Tax. Gas Tax.	5,003 26,922 11,527	0 0	49.459	25		
Woods and Forests.			43,453	35	1,822,814	84
WOODS AND TOKESIS.	:					
Bonus Timber Dues Ground Rent Transfer Fees.			152,223 998,863 65,084 2,879	15 38	,	
Assay Fees	1,642 504 517	00			1,219,051	32
Rondeau Park	546 503	45 75	2,664	15		
Forest Reserves.	1,164		2,214	45	4,878	60
REFUNDS.				i		
Diamond Drill. Temagami Timber Cutting Fire Ranging Surveys Inspection Fees. Wood-Ranging, Agents' Salaries.			1,190	81 44 79 50	21,749	33
					3,068,494	09

D. G. ROSS,

Accountant.

AUBREY WHITE, Deputy Minister, Lands and Mines.

APPENDIX No. 5.

STATEMENT of the receipts of the Department of Lands, Forests and Mines for the year 1907, which are considered as Special Funds.

Service.	\$	c.	\$ c.
Clergy Lands. Principal	957 1,347		2,304 89
Common School Lands. Principal	4,670 9,289	56 22	13,9 5 9 78
Grammar School Lands. Principal	678 1,096		1,774 50
University Lands. Principal	1,091 305	17 86	1,397 03 \$19,436 20

D. GEO. ROSS,
Accountant.

AUBREY WHITE,
Deputy Minister Lands and Forests.

APPENDIX No. 6.

STATEMENT of Disbursements of the Departments of Lands, Forests and Mines for the year 1907

			•
P			
Name.	\$ c.	\$ c.	\$ c.
AGENTS' SALARIES.			
Land.			
Andonesi Inc. II	200 00		
Anderson, Jno. H	3 00 00 900 00		
Baker, R. H	87 50		
Both, Chas	100 00		
Belyea, C. W	287 50 300 00		
Byers, R. J.	500 00		
Campbell, Wm	300 00		
Deacon, J. M	500 00 300 00		
Ellis, Jas	208 34		,
Freeborn, Dr. J. S	500 00		
Grills, J. J.	500 00	ĺ	
Handy, E Hartle, Wm	500 00 2 62 50		
Hesson, W. H.	375 00		
Hollands, C. J.	300 00	İ	
Hugh, Williams	500 00 65 69		
Levis, J. A.	250 00		
McFayden, Alex	300 00		
MacLennan, J. K	500 00		
Philion, J. A. Powell, F. R.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
Prince, Adam	500 00		
Pronger, R. H.	300 00		
Scarlett, J. S	500 00 500 00		
Warren, D. B	300 00	1	
Whybourne, W. E.	179 16		
Wright, E. A.	150 00 500 00	Ì	
Young, H. N.	300 00		
_		11,506 39	
Timber.			
Christie, W. P.	1,600 00		
Hawkins, S. J	1,400 00	,	•
Henderson, Chas	1,600 00 1,200 00		
Johnson, S. M.	1,600 00		
Kennedy, John	266 00		
McDonald, Hector	1,400 00		
Maughan, Jos. Margach, Wm.	1,400 00 1,600 00		
Oliver, J. A	1,400 00		
Stevenson, A	1,400 00	14 966 00	
Homestead Inspectors.		14,866 00	
Barr, Jas.	1,200 00		
Burnes, C. W	900 00		
Chester, Thos	1,200 00		
Carried forward		26,372 39	

					i	
Name.,	\$	c.	\$	c.		\$ c.
Brought forward			26,372	39		
AGENTS' SALARIES. — Concluded.						
Homestead Inspectors.—Concluded.						
Groulx, R. J. Hunt, J. McK. Quenneville, I. Watson, T. P.	600 600	000000000000000000000000000000000000000	6,012	50		29
AGENTS' DISBURSEMENTS.			,			1
Land.	•					
Brown, J. B Belyea, C. W Byers, R. J Campbell, Wm Deacon, J. M Ellis, Jas. Freeborn, Dr. J. S. Grills, J. J Handy, E Hugh Williams McFayden, Alex Philion, J. A Powell, F. R Prince, Adam Pronger, R. H Warren, D. B Whybourne, W. E Young, H. N	20 13 33 6 30 36 39 39 39 29 30 30 30 30 30 50 50 50 50 50 50 50 50 50 50 50 50 50	00 00 90 10 18 50 95 22 75 23 40 56 00 70 40 12 50	662	30		
Timber .			002	30		
Christie, W. P. Hawkins, S. J. Henderson, Chas. Howie, R. G. Johnson, S. M. Kennedy, Jno. McDonald, H. Maughan, Jos. Margach, Wm. Oliver, J. A. Stevenson, A.	547 275 420 253 76 686 497 1,930	75 72 6 01 9 66 8 24 6 73 6 92 6 65 9 47 2 41 6 31	2.20	05		
Homestead Inspectors.			6,683	87		
Barr, Jas. Burnes, C. W Chester, Thos. Groulx, R. J. Hunt, J. McK. Quenneville, I. Watson, T. P.	520 500 102 478 189	20 54 31 25 370 48	2.25-			
Carried forward			2,808			
			42,539	11	1	

1

	1		
Name.	\$ c.	\$ c.	\$ c.
Brought forward		42,539 77	
Miscellaneous.			
Angus, M., Inspection Township of Widdifield. Armitage, Jas., "lots in Kincardine Bilton, Geo., Caretaker Islands Crosby Township Campbell, H., Inspection Township of Esquesing Deelbert, Ames, "Islands Dog Lake, etc. Danis, Samuel, Caretaker Leonard Islands Gamey, Wm. H., Inspection Lorne, Drury, Nairn do "Graham and Waters Hurdman, John, "Shakespeare and	156 00 7 00 25 00 6 50 20 00 20 00 191 00 131 05		
McKinnon Seegmiller, M., services 'disbursements Scovell, Dr. S. S., rent Seegmiller's office, 1906. Watts, Geo., disbursements Expense, Colonization Party	132 00 30 68 26 90 360 00 9 50 302 33		
	-	1,417 96	43,957 73
Ottawa.			10,001 10
Darby, E. J., Agent	1,500 00 200 00	1,700 00	
Larose, S. E., Clerk	583 33 74 25	1,000 00	
Quebec.	-		3,357 58
Nicholson; B., Agent	1,500 00 150 00	1 650 00	
Rent	93 75 257 92	1,650 90	
Wood Ranging.	-	351 67	2, 001 67
Allan, R. A. Ansley, J. J. Ansley, W. E. Arnill, Wm. Barrett, Thos. Disbursements	1,432 00 96 37	1,110 00 1,110 00 590 00 526 60	
Bastien, John Disbursements	376 00 13 20	1,528 37	
Baulke, G. B. Bliss, L. E. Brinkman, A. B. Chalmers, Geo. Chalmers, G. J. Chenier, D. A.	13 20	389 20 15 00 1,385 00 470 00 185 00 955 00 885 00	
Carried forward		9,148 57	49,316 98

Name.	\$	c.	\$	c.	•	c.
Brought forward			9,148	57	49,316	98
Wood Ranging. ——Continued.						
Christie, W. P., Disbursement. Coburn, John. Corrigan, R. F. Doyle, Terence. Durrell, Wm. Fairbairn, N. H Ferguson, E. A. Fisher, Geo. Foster, E. G.			625 795 100 1,290 20 220 250 780	00 00 00 00 00 00 00 38		•
French, L Gorman, Jas. P. Gorman, Patrick. Halliday, Jas			770 100 900	00		
Disbursements Hartley, Chas Herring, E. C Hickerson, M. T. Disbursements	595	35	1, 232 830 1,140	00		
Hill, Joshua Huckson, A. H Hurdman, W. H. Hutton, Jno Jervis, Henry Johnson, S. M.	314	55	620 760 1,205 715 975 1,450	00 00 00		
Disbursements Johns, Alex Lalonde, Ephraim	1,108	00	8 45 640			
Disbursements Lee, J. B Londry, W. E Lucas, R. G Manice, William Disbursements	1,500		2,429 870 501 550 1,095	92 00		
Margach, J. A. Matheson, Wm Maughan, Jos. Menzies, A. Milway, Jos Morley, J. R.	480		1,744 590 645 191 1,325 379	00 00 16 00		
Disbursements Moran, Andrew. Murray, Geo. Murray, Wm McCaw, John G McCreight, John Disbursements	······	00	497 60 1,260 1,385 1,045	00 00 00		1
			4,707	33		
Carried forward			44,220	15	49,316	98

Name.	\$	c.	\$	e.	\$ c.
Brought forward			44,220	15	49,316 98
Wood Ranging.—Continued.					
Conald, Thos			536	00	
IcDonald, Hector			114		
IcDonald, A			100		
IacDonald, S. C., disbursements			182	20	
Disbursements	133				
Distribution			1,999	39	
IcLean, Jno			100		
IcNabb, Alex			100		
IcNamara, Jno			775		
IcPherson, J. S.			390 1,305		
lewburn, Wm			835		
liver, J. A	200	00			
Disbursements	88	75	000	٠	
aul, Chas		-	288 200		
layfair, Andrew			790	-	
eid, Henry			279		
Revell, L. O	431	00			
Disbursements	62	00	400	~~	
Ridley, Robert	. 498	00	493	00	
Disbursements		65			
			507	65	
Ritchie, Jas. A			747		
Rogers, Fred. W			100	00	
toss, Geo	707 216				
Disbutsements			923	55	
haw, Alfred			548		
haw, Geo			1,135	00	
mith, J. C. D	$\frac{381}{61}$				
Disbursements		-30	442	35	
Jrquhart, A			100		
incent, H. T			1,095	00	
Vatts, Geo					
	804		1,979	20	
Vagner, F			600		and the same of th
Velch, Harold			760	00	
Veston, F. R		• • • • •	200	00	ALANA MARKATAN MARKAT
Vhalen, P. JVhyte, J. T. G	500		1,250	00 -	
Disbursements		80			
			516	80	
Vilkins, Geo			200	00	
Vood, W. D			100		
uill, Thos			975	UU	64,887 97
					02,001 01

Name.	\$ c.	\$ c.	\$ c.
Brought forward			114,204 95
FIRE RANGING.			
Adams, Arthur	197 65 58 02	119 00	
Algoma Commercial Co	58 66 37 82	255 67	٠.
Airhart, Wm		96 4 8 55 00 117 00	
Ambrose, A. W	352 50 30 30		
Armstrong, Dalton	285 00 8 85	382 80	
Arnott, Wm. Archer, Geo. Atkinson, Thos. S. August, Frank		293 85 124 00 131 00 133 00 131 00	ı
Barr, Archie. Beck, C., Manufacturing Co. Belanger, J. B. Bellefeville, Oliver. Beaudry, Jno.		131 00 82 75 88 00 131 00 262 00	
Bertrant, Paul	362 50	369 50	
Beggs, W Benson, J. B. Biggs, A Disbursements	305 00 19 70	122 00 131 00	
Biggs, J Disbursements	305 00 9 70	324 70	
Booth, J. R Boisvert, Jno Bonter, Smith	365 00	314 70 92 50 131 00	
Boyd, David	362 50	390 40 1 3 1 00	
Bracken, Jno	360 00	391 20	
Brigden, Jas Disbursements	197 50 1 30	389 20	
Brinkman, A. B. Brigham, T. G. Bromley, Ed. Brooks, F. W.		198 80 216 00 29 50 131 C0 131 00	
Carried forward		6,027 05	114,204 95

Name.	\$	С.	\$	c.	\$	с.
Brought forward			6,027	05	114,204	95
FIRE RANGING.—Continued.			,		,	
crooks, Thos. H		::	131	00		
rown, J. B	1	50 10				
Disoursements			384	60		
Frennen, M., & Sons Co			10	00		
rown, E. B.			131			
rown, John			131			
rownlee, Samuelrennan, Samuel			131	00		
uchanan, R. F.		00	131	00		
Disbursements		30				
<u></u>			301	30		
urger, Wm		50				
Disbursements	23	70	296	20		
Surgess, W. H			131			
Surns, Wm			131			
surke, Jno	1		130	00		
urke, James			8	00		
Disbursements		60				
Disbursements			346	60		
Surrows, Chas	335	00	010	00		
Disbursements	28	00				
Downson Toward M				00		
Burrow, Ernest MBurton, Robert				00		
Syrnes, Jas				00		
airns, Bernard				00		
ameron, J. V			131	00	*	
ameron, A				00		
Sampbell, H		- 1		00		
Zampbell, C. AZampbell, W				00		
ampbell, J. L		00	10	00		
Disbursements	910	40				
lamahall C			1,725			
ampbell, S		00	277	50		
Disbursements		6 60				
			346	60		
ampbell. Bruce				00		
anada Copper Co				50		
arlin, Thosarter, Thos	255	50	131	00		
Disbursements		2 40				
T. A. T. A.				90		
Carter, Fenton		• • • • •		00		
Zaron, VitalZarnachan, Gordon	360	00	137	00		
Disbursements		3 60				
			378	60		
Cass, W. J.		2 50				
Disbursements	29	15	9.41	e =		
·			241	65 		
Carried forward			13,663	90	114,20	1 9

Name.	\$ c.	\$ c.	\$ c.
Brought forward		13.663 90	114,204 95
FIRE RANGING.—Continued.			
Cassiday, Jas		13 30 103 00	ē
Chamberlain, E. H. Charlton, J. & W. A.		66 00 83 88	b
Chase, Jos. Chenier, Noe.		59 00 69 00	
Christilan, Hy		131 00 130 00	
Christie, W. P., disbursements		206 44	•
Disbursements		177 25	
Cleary, J. F. Clute, Geo		91 10 97 00	
Clysdale, Alex. Collins, Chas		131 00 131 00	
Collins Inlet Lumber Co. Cole, J. J.		46 88	
Disbursements	21 80	381 80	
Cavandish Lumber Co		16 50 140 00	
Conlan, J. & T. Coke, Ed. F.		3,026 10	
Disbursements	21 80	386 80	
Colclough, J. H	342 50 33 15		
Coghlan, Thos.		375 65 131 00	
Connelly, Jas.		7 00 41 00	
Constantine, E	132 00 131 00		
Cousineau, A.		263 00 484 00	
Conger Lumber Co		131 00 113 00	
Connley, Dan		87 00 43 00	
Conboy, Timothy		131 00 131 00	
Cook & Bros. Lumber Co		41 81 131 00	
Cote, C Cousins, Jas		131 00 131 00	
Cox, Jos. Cottenham, Wm.	370 00	118 00 132 00	
Coulter, Chas Disbursements	21 10	391 10	
Corteau, E	116 00 131 00	391 10	•
		247 00	
Carried forward		2 2,411 51	114,204 95

Name.	\$ c.	\$ c.	\$ c.
Brought forward		22,411 51	114,204 95
Prought for acrea.		22,111 01	111,,01
FIRE RANGING.—Continued.			
crawford, E	270 00		
Disbursements	2 20	272 20	
Crawford, A. E	292 50	2.2 20	
Disbursements	34 05	222 22	
Terrelos Obos		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Crumley, Chas		117 00	
Culhane, D		74 00	
Ourtin, D		131 00	
Curtie, C. A	332 50 28 10		
Disbursements	20 10	360 60	
Cuthbertson, Wm		131 00	
Dale, Jno. A	132 00		
do1907	131 00	263 00	
Daniels, Jno		123 00	
Dane, Alfred		131 00	
Davis, W. J		131 00 104 00	
Davidson, Jas Davidson, Ira	357 50	104 00	
Disbursements	27 20		
D. I		384 70	
Dawkins, Jno	47 50	119 00	
Disbursements	13 90		
		61 40	
Dennison, Henry		$\begin{array}{ccc} 131 & 00 \\ 25 & 00 \end{array}$	
Dillabaugh, Reuben		131 00	
Dingman, Jno		4 50	
Dion, L. A	345 00 11 70		
		356 70	
Dougan, H. L	282 50		
Disbursements	33 10	315-60	
Downey, R. A	310 00	310 00	1
Disbursements	35 64		
D		345 64	
Dowe, Wm		131 00 13 2 00	
Duff, T. A. J	315 00	102 00	1
Disbursements	19 10	00: 10	
Dufond, Ignace		334 10 108 00	
Dunn, Thos		131 00	
Duchanne, A	380 00		
Disbursements	23 60	409 60	
Duvel, C. A.	365 00	403 60	
Disbursements	14 00		
	14 00	379 00	

	1	<u> </u>			
Name.	\$	c.	\$	c.	\$ c.
Brought forward			28,131	10	114,204 95
FIRE RANGING.—Continued.					1
Dreany, Alex.		00			
Disbursements		00	337	00	
Draycott, E. A. Driver, Jos			133 131	00	
Eady, Robt. S			121 5 2	00 00	
Elliott, Jackson Disbursements		00	400	00	
Elliott, Wm. Eno, Geo				65	,
Enright, Thos. Disbursements	357	50 75	110	00	
Ervin, Thos.			367 131		
Evans, Stanley	362	50 45			
Farrell, K. A		50	386	95	
Disbursements		50	286	00	
Ferguson, Wm		30	050	00	
Fairbairn, N. H. Disbursemeuts1906 Ferguson, E. A			350 23 131	15	
Ferguson, Julien. Ferguson, J. H.			104		
Ferris, Richard Disbursements	480				
Filiator, Jas.			492 125		
Findlay, John			85	00	
Finlayson, John		•••••	132 95	00	
Fitzhenry, John			131	00	
Fisher, Geo			200		
Firstbrook Box Co			131	50 00	
Fleming, F. W			131	00	
Foisey, M	1		131		
Foran, Patrick		••••	131 79	00	
Fraser, Geo				65	
Fraser, J. K	265	00 25			
Fraser, John			279 106		
Frappiere_A		1		00	
Frawley, F			108	00	
Frechette, O	131		131	00	
do1907	131		262	00	`
Commiss tomores		-			
Carried forward		• • • •	34,275	80	114,204 95

Name.	\$ c.	\$ c.	\$ c.
Brought forward		34,275 80	114,204 95
Fire Ranging.—Continued.		02,210 00	
Gagnon, A	81 00 131 00	018 00	
Gagnon, Felix 1906 do 1907	52 00 99 00	212 00	
Gagne, Ferdinand	812 00 322 22	151 00	
Dispursements		1,134 2 2	
Gallagher, Jas		131 00	
Gallie, Gordon	277 50 32 50		
		310 00	
Gardiner, Jno	131 00 128 00		
		259 00	
Garcea, A	131 00 131 00	202.20	
Garvin, Morgan Disbursements	365 00 2 00	262 00	
		367 00	
Gaudette, PhilipGemmell, JnoDisbursements	552 00 149 60	131 00	
Geddes, Jas. H.	335 00	701 60	
Disbursements	31 60	200 00	
Genereaux, Nelson1906		$\begin{array}{ccc} 366 & 60 \\ 112 & 00 \end{array}$	
Georgian Bay Lumber Co		13 50	
Gingrass, Jos		97 50	
Gibson, Jas		131 00	
Gilchrist, John J		35 00	
Gill, John W		$\begin{array}{c} 85 & 00 \\ 124 & 14 \end{array}$	
Gillies Bros		131 00	
Gongeon, AGongon, Jas		100 00	
Gordon, Jas		112 00	
Gordon, Geo. and Co		48 75	
Gorman, P. J.		53 00	
Gould, F		132 00	
Graham, G. N	335 00		
Disbursements	14 90	040.00	
Graham, David		349 9 0 80 00	
Grafton, W. F		75 00	
Granberger, Thos	134 00 131 00		
a		265 00	
Granton, Jas Disbursements	362 50 23 90	386 40	
Gravelle, John		131 00	
Gravene, John Graves, Bigwood and Co.		216 32 131 00	
Carried forward	-	41,110 73	114,204 95

	Г					
Name.	\$	c .	\$	c .	\$.	c.
Brought Forward			41,110	73	114,204	95
FIRE RANGING.—Continued.			,			
Greenshields, Ed			83	00		
Green, Ed. W				00		
Griffith, Wm				00		•
Griffin, Jas. Groulx, Arthur				00		
Grozell, A. D.				00		
Guerin, Benoit				00		
Guertin, Oliver		00				
do1907	131	1 00	000	. 00		
Gunter, P. M				00		
Guthrie, Wm.		00		00		
Disbursements		3 10				
2 3			356	10		
Guy, Norman		0 00				
Disbursements		30	381	30		
Haley, Edward				00		
Hamel, Peter				. 00		
Hand, Thomas		1 00		}		
Disbursements	10	00	E 9.4			
Harkness, G	337	7 50	034	00		
Disbursements		70				
				20	•	
Harper, Thos				00		
Harrison, Jno. & Sons			29	00		
Hart, R. R		7 50				
Disputsements			310	00		
Hawkesbury Lumber Co				00		
Hartley, Mark				00		
Hasken, Wm				00		
Hawley, D. J.		5 00	100	00		
Disbursements		5 90				
			390	90		
Hebert, Louis		7 50				
Disbursements	14	1 90	319	40		
Hennessy, C. F				00		
Henderson, Chas				72	,	
Herring, E. C		3 00				
do		0 15				
Disputsements		93	389	08		
Herriman, N. J.				00		
Hickey, Jas. L				. 00		
Hill, Jas				50		
Hillman, Jno				00		
Holland and Graves				13		
Hogarth, Henry			127	00		
Hope Lumber Co				50		
Holt, Geo. H		• • • • • •	8	00		
Brought Forward			47,317	56	114,204	95

	1					
Names			•	_	•	
Name.	\$	c.	\$	С.	\$	c.
Durately former J			47 917	F.C.	114 904	05
Brought forward			47,317	90	114,204	90
FIRE RANGING.—Continued.						
Holt Lumber Co			4	00		
Hooey, Geo. F	312	50				
Disbursements	25	45	337	O.E		
Hodgins, Thos	370	00	001	60		
Disbursements	25					
77 11 1 17 77	200		395	00		
Hubbard, W. H.						
Disbursements	27	40	389	90		
Hunt, J. W			107			
Hurd, Edwin				00		
Hurd, Asa			131	00		
Irish, Wm.	255					
Disbursements	13	15	268	75		
Johnston, Robt			262			
Jones, R. D.			131			
James, Thos			89	00		
Keeler, Geo. N	362					
Disbursements	23	90	386	40		
Kennedy, Robt	55	00	300	40	- 35	
do1907	48				t I	
			103	00		
Kennedy, Jno. J			109			
Kelly, Jno.		- 1	131	00		
Kirby, Jno			131			
Keys, A. B.	362		101	•		
Disbursements	25	40				
Will C W			387			
Kidd, G.W			131	00		
King, Frank.			290			
King, Chas			106			
Kirk, W. J				00		
Kruger, A. P		• • • •	347			
Lafleur, Wm			131 131			
Lambert, Hy				00		
Lamothe, Michael			131			
Langlois, Adolphe				94		
Laroque, Mark		1		00		
Larkins, Edward Larrimer, Jos			80 116	00		
Lavois, Xavier.			131			
Law, W. J			131	00		
Lawson, David		1	127			
Ledwood, Thos. H				00		
Lebeau, JnoLeblanc, A			$\frac{120}{131}$			
Lee, Jas. B.	1,215		101	-		
Disbursements	175					
			1,391	56		
Carried forward			54,691	96	114,204	95
7				j		

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Name.	\$ c.	\$	c.	\$ c.
Brought forward		54,691	96	114,204 95
FIRE RANGING.—Continued.				
Lefrance, Thos	130 00 131 00			
Lendrum, Jno		261 131 106	00	
Lloyd, Ed Londry, W. E		111 111	00 00	
Lorenz, Chas	197 50	131 133		
Disbursements	$\frac{4\ 40}{275\ 00}$	201	90	
Disbursements	7 40	282 21	4 0 00	
Loughrin, L Lynch, M. D Macfarlane, R. L		131 106 128	00 00	
Macdonald, Jno. D	98 00 114 00			
Mackie, N	17 50 3 10	212	00	
Madigan, Wm		20 156 131		
Malloy, Chas. Manes, Jno. Manion, Isadore			00 00	
Margach, J. A. Disbursements	60 00 37 15			
Margach, Wm., disbursements		138 131	00	
Marion, Jule		78 109	94 00	
Disbursements	6 20	366 131		
Mercier, Pat	131 00 131 00	262	00	
Merchant, Herbert		126 484	00	F
Merchant, Jno	10 00	494		
Middleton, Jno		131 80 101	00	
Montroy, J. J	131 00 131 00	2 62	00	
Carried forward	-	60,317		114,204 95

Name.	\$	c.	\$	c.	\$ c.
Brought forward.			60,317	21	114,204 95
FIRE RANGING.—Continued.					
Monford, Jno			162		
Mongeon, Alex		• • • • •	131		
Mongeon, Napoleon			131	UU	
do1907	131				
Morand, Louis	302	50	2 6 2	00	
Disbursements		25			
, T. D.			308		
Morley, J. R	292		28	75	
Disbursements		40			
Joore & Macdonald1906			320		
Moore & Macdonald				00 28	•
Mosley, Michael			85	00	
Mountstevens, Jno			68 131	00	
Murphy, Wm	207	50	101	00	
Disbursements	18	30	005		
fuskoka Mill and Lumber Co			225 26	50	
IcAmmond, Jos			102	00	
IcAdam, Wm		• • • • •	131		
IcBean, R			131 131		
IcCauley, Jerry			66	00	
IcClure, A			71 131	00	
IcCoy, Francis			17		
IcCullough, David	370				
Disbursements	23	60	393	90	
IcCaw, Jno. G	376		000		
Disbursements	74	40	450	40	
IcCaw, Jas			131		
IcCormick, Victor ()	335	00			
Disbursements	12	10	347	10	
IcCullough, Chris	370		011	10	
Disbursements	21	50	901	50	
IcDonald, Garnet	287	50	391	50	
Disbursements	21	35	220		
IcDonald, A. J			308 97		
IcDonald, Alex			104		
IcDonald, Frank	345				
Disbursements	1	40	346	40	
CDonald, Malcolm			92		
IcDonald, Donald	131 100				
1307	100	00	231	00	
Carried forward			65,909		114,204 95

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Name.	\$ c.	\$	c.	\$ c.
Brought forward		65,909	84	114,204 95
FIRE RANGING.—Continued.				
McDonnell, G. D				
McDougall, D. M		140	00 4 8	
McGarvey, Robert	123 00	113 131		,
do		254	00	
McGuire, A. & Co			50 00 65	
McIntyre, Wm McIver, Hugh Disbursments	357 50		00	
McKay, Hugh		390		
McKay, Angus		401 131 61 1 2 7	00	
McLaughlin, Jno McLaughlin, Bros McLean, Jas. D McLeod, Bernard		131 11 86 122	00 00 00	
McMullen, Wm McMillan, Jno McMillan, Donald McMillan, Duncan		131 106 100	00	,
Disbursements		372 70 95 129	00 00	
McRae, Jno. D. McTavish, R. Disbursements		454	75	
McPhee, Hugh	131 00 131 00	386		
McQuire, Hugh Nadon, Xavier Disbursements	165 00 10 80	262 120		
Nault, Jas	340 00 21 20	175 3 3 3 6 1	00	
Carried forward		71,630	14	114 204 95
3a. L. M.				

,			
Name.	\$ c.	\$ c.	\$ c.
Brought forward		71,630 14	114,204 98
FIRE RANGING.—Continued.			
Vowburn Wm	10 00		
Newburn, Wm. 1906 do 1907			
Newton Thos		538 00 131 0 0	
Vicholson, Alex		114 00	
Prien, M	1	131 00	
'Brien, Phil' Connor, Jos		93 00	
Disbursements			
· · · · · · · · · · · · · · · · · · ·		389 50	711
)'Neil, Jas		6 00	
Disbursements	13 80		
Owens, R		348 80	
Page, Noe		124 00 126 00	
Patterson, Frank	347 50		
Disbursements	30 70	378 20	
Patterson, Arch		24 00	
Payne Wm		52 00	
Pearson, J Disbursements			
2 isotasettes		332 58	
Peeler, Chas		98 25	
Pembroke Libr. Co		52 25	
dó 1907			
Phillips, T. E		239 00 113 58	
Pitt, Benj		82 25	
Piper, E. G 1906	202 00		
do 1907	131 00	333 00	
iper, Chas		60 00	
layfair, A. W		28 00	
Playfair and White		42 58 132 00	
ollard, W. E		113 58	
restley, Jas	217 50 15 00		
	10 00	232 50	
rice, H. S.	342 50		
Disbursements	29 50	372 00	
nilty, Jno	375 00	012 00	
Disbursements	28 80	409 00	
uigley, Wm		403 80 201 00	
anger, A		79 00	
athbun, Co'yeadman, R		64 50 287 50	
legan, Mark		$287 50 \\ 118 00$	
denaud, Jos		131 00	
Carried forward		77,602 01	114,204 95
Sairted Jordand		77,002 01	114,204 95

Brought forward		77,602 01	114 ,2 04 9 5
FIRE RANGING.—Continued.			
Retty, Jno. G		55 62	
Retty, Jas		55 62	
Revell, L. O		608 00	
Reynolds, Jas Richardson, J		131 00 87 00	
Ritchie, R. and T.		16 50	
Rivers, Jno		84 00	
Rodgers, Thos		111 00	
Rocky Farm Limit		2 63	
Ross, A. C		130 0 0 131 00	
Ryan, Jno	78 00	101 00	
"1907	131 00		
		209 00	
Salois, Oliver		104 00	
Saginaw Lumber and Salt Co		4 50 131 00	
Savard, August	372 50	101 00	
Disbursements	14 50		
N 41' T	05.00	387 00	
do	95 00 74 00		
do1907	74 00	169 00	
Scheich, Jno		131 00	
		104 00	
Scott, Jno		119 00	
Scott, Robt		532 00 114 00	
Shields, Geo		110 00	
Shields, Thos		125 00	
Shields, W. J		150 45	
		19 00	
Sheppard, E. C	297 50 32 50		
Dispute Control of the Control of th	32 00	330 00	
Sheppard & Morse Lumber Co		640 67	
Sheppard & Wallace		19 00	
Sicard, Frank		112 00	
Scidmore, Ed	126 50	20 00	
do1907	132 00		
		258 50	
Sloan, Pat		70 00	
Sloan, JnoSloman, Thos		11 00	
Sloman, Thos		73 00 131 00	
Smith, Willard		69 00	
Smith, Jos		86 00	
Smith, J. D. C	999.50	204 00	
Smith, A. L	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Lightirsements	19 40		
Disbursements		341 90	
Sneezy, Ben		341 90 1 3 1 00	
Sneezy, Ben			

Name.	\$ c	\$ c.	\$ c.
Brought forward		84,051 40	114,204 95
FIRE RANGING Continued.]		
preadborough, Newell		128 00	
tav, Jno		86 00	
t. Ámour, Jnot. Anthony Lumber Co		$105 00 \\ 43 00$	
		127 00	
t. Dennis, Chas		82 25	
		88 00	
tewart, Duncantewart, D. R		$\begin{array}{ccc} 79 & 00 \\ 116 & 00 \end{array}$	
tethun, H		290 00	
tellar, Fred		42 00	
trans, Philip		91 00	
torey, S		113 00 78 00	}
tringer, Davidtuart, H. B	335 00	70 00	
Disbursements	31 10		
•		366 10	
ully, Ed		$108 00 \\ 131 00$	
ymington, Wmang, Jno	355 00	131 00	
Disbursements	9 50		
		364 5 0	
erryberry, L. E	337 50		
Disbursements	22 80	3 60 3 0	
odd, Chas	270 00	300 30	
Disbursements	2 20		
		272 20	Į
odd, J. E	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Disbursements;		336 5 8	[
hibert, Phil	295 00		
Disbursements	6 00	001.00	1
manuble Ton	355 00	301 00	1
remblay, Jos	9 40		
		364 40	
ompkins, Jno. H		391 00 .	
hessalon Lumber Co		81 00 109 00	
Phomas, Jas	131 00	103 00	
do1907	131 00		
	200.00	262 00	
homson, Jas	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	•	
Disbursements	20 20	313 25	
Thompson, Chas. R		347 50	
hompson, Geo. S		104 00	
'hompson, Milton	345 00		
Disbursements	17 60	362 6 0	
Chompson, Wm		131 00	
Culloch, L. G		124 00	
Curner Lumber Co		$\begin{array}{c} 7 & 25 \\ 110 & 00 \end{array}$	1
		1117 (10)	

	1	-			1	
Name.	\$	c.	\$	c.	\$	с.,
Brought forward			90,466	33	114,204	95
FIRE RANGING Continued.						
Tyson, Thos Urquhart, A Valliant, G Vallentyne, D Vernette, Jno			131	00 00 00		
Vien, Michael 1905 Villiers, C. 1905 Volker, P. D. 1905 Wallace, Samuel 1905 Wallace, Jno 1905 Wales, T 1905			79 104 10 4	00 00 00		
Walsh, Jas	18	1 00 1 00 2 50 3 35	2 62 2 99			
Watson, W. V. Disbursements	14	0 00	245 171			
Watson, Geo. Wandby, Bert. Wickens, Hy. Disbursements			49 17	00 00		
Wilford, E. C		7 50 9 2 0	138			
Williamson, Robt		5 00 6 50	-316	70		
Wilkins, Geo. Williams, A. D. Wilson, R. D. Wilson, Daniel Wilson, Dave. Windle, Jno. 1906 Winters, Jno. W. Woilford, A. Woodcock, Geo.			142 121 15 131 131	00 00 50 00 00		٠
Disbursements	34	0 00	. 375 327			
Wright, J. Disbursements	8	37 00 94 40	372			
Wright, C. M		07 50 26 28	333	40 78		
Carried forward			96,494		114,204	95

Name.	\$ c.	\$ c.	\$	e.
Brought forward		96,494 91	114,204	9
FIRE RANGING.—Continued.				
Wright, Colin	370 00 40 60	410.00		
Yandon, Jas		410 60 91 00 131 00 107 00	97,234	5
BELLEVILLE ASSAY OFFICE.			,	
Burrows, A. G. salary Turner, N. L salary	333 00 667 0 0	1,000 00		
Embury, W. J	268 28 209 75			
Supplies Disbursements	537 36 343 24 172 13	4 78 03		
MINING DEVELOPMENT.	-	1,052 73	2,530	70
Exploration .				
Bowen, N. L services Disbursements	383 65 529 74	010.00		
Boyd, D. G special services Disbursements	100 00 236 15	913 39		
Brock, R. Wservices Disbursementsservices	338 46 213 28	336 15		
Goodwin, Wmservices Disbursementsservices	317 30 19 25	551 74		
Hore, R. E. services Disbursements services	350 00 27 10	336 55		
Kidd, G. E services Disbursements	284 29 24 60	377 10		
Mitchell, A. C	712 54 906 44	308 89 178 86		
Parsons, A. L. services Disbursements	447 11 404 50	1,618 98		
Rogers, W. R services Disbursements	654 84 532 78	851 61		
Rogers, F. Cservices Disbursementsservices	105 77 29 05	1,187 62		
		134 82		
Carried forward		6,795 71	218,970	22

			1
Name.	\$ c.	\$ c.	\$ e.
Brought forward		6,795 71	213,970 22
Rothwell, T. Eservices Disbursements	414 26 638 61		16
Stewart, R. B services Disbursements	360 39 3 65	1,052 87	
Whitson, J. F	25 55 13 85 6 50	364 04 °	
Advertising. Printing and stationery. Express.	15 00 930 48 205 47	45 90	
MINING RECORDERS.	. 200 17	1,150 9 5	
Belyea, C. W services Disbursements	500 00 84 00		•
Bowker, S. Tservices Disbursementsservices	636 70 312 48	584 00	
Hough, J. A. services Browning, A. J. do McEachren, F. Y. do Jeffrey, W. H. do Disbursements	907 06 470 20 105 77 53 46 1,696 56	949 18	. ,
Lemieux, F. F	636 70 146 13	3,233 05	
Morgan, J. W services Disbursements	525 00 390 84	782 83	
Macphail, Alexservices Disbursementsservices	516 60 1,195 37	915 84	
McQuire, H. F services Disbursements	500 00 190 20	1,711 97	,
McArthur, T. A. services McLaren, Miss K. do Disbursements	1,109 60 421 33 499 30	690 20	
Smith, Geo. T. services McAuley, N. J. do Bruce, A. E. D. do Ferguson, R. A. do Meagher, T. J. do Monroe, Miss E. L. do Smith, Miss M. H. do Morgan, Miss Kate. do Marshall, J. A. disbursements Disbursements Torrance, Thos. H., services	2,000 00 1,200 00 826 72 850 00 603 75 246 92 480 00 297 50 36 45 125 93 384 60	2,030 23 6,667 27	
Carried forward	384 60	26 074 04	919 070 90
Darrica joraara	.994 00	26,974 04	213,970 22

	1		1
Name.	\$ c.	\$ c.	\$ c.
Brought forward	384 60	26,974 04	213,970 22
MINING RECORDERS Continued.			
Williamson, Wallace, do Knapp Disbursements	374 23 175 00 796 31		
Mining Commissioner.		1,730 14	
Price, S., services	3,000 00 2,163 34		
Mining Inspectors.		5,163 34	
Bartlett, Jas., services	930 40 1,420 17	2.050.55	
Burrows, A. G., services	1,066 67 552 54	2,350 57	
Corkill, E. T., services	2,000 00 1,247 45	1,619 21	
Houston, D. W., services	689 29 133 65	3,247 45	
rwin, R. T., services Disbursements	698 97 114 65	822 94	
McLaren, Geo. R., services	689 29 93 45	813 62	
MacKenzie, G. C., services	881 60 410 24	782 74	
Mickle, G. R., disbursements	750 00 348 15	1,291 84 71 50 1,098 15	*
Robinson, A. H. A., services	1,900 00 650 25	2,550 25	
Wade, E., services	471 62 71 45	543 07	
Miller, G. W., services	4,000 00 960 62	4,960 62	
Knight, C. W., services Disbursements	1,581 26 344 31	1,925 57	
Coleman, A. P., services. Disbursements	500 00 1,086 24	1,586 24	
Supplementary Revenue. Mickle, G. R., services	1,793 86		
Disbursements	494 80	2,288 66	
			213,970 22

				.
Name.	\$ c.		\$ c.	\$ c.
Brought forward			59,819 95	213,970 22
$Supplementary\ RevenueContinued.$				5
Scott, Jno., services	313 149		46 3 2 0	
Toyne, Jno., services	300 10 2		402 80	
Cullers' Act.		-		60,685 95
Currie, D. H., services	16 26		49.70	
McDougall, J. T., disbursements McNabb, A. D., services. Margach, Wm., disbursements. Oliver, J. A., disbursements. Watts, Geo., disbursements Advertising.			42 70 10 50 8 00 23 50 22 30 4 80 8 40	
Forest Reserve.		-		120 20
Temagami Re serv e .				
Baker, H. W	310 17		907.00	
Bayliss, J. W	327 21		32 7 60	
Bickford, L. D	117 13		849 10	6
Bracken, E. J Disbursements	345 32		130 85	
Byers, Jas. C	33 0 19		377 90	
Carruthers, R. A	340 18		349 90	
Cornett; W. F Disbursements	350 33		358 20	
Currey, D. V	310 20		383 90	
Delbec, Trefles	332		330 30	
Davidson, Ernest Davidson, Geo. T	290		340 10 85 00	
			309 60	
Carried forward			3,342 45	274,776 37

Name.	\$	c. \$	c.	\$ e
Brought forward		3,342	2 45	274,776 3
Forest Reserve —Continued				
Temagami Reserve.—Continued.		-		
Deacon, Wm. A	350 (8 /	70	. 70	
Dion, A Disbursements	330 (00 55	70	
Duff, Jos Disbursements	347 E	50 20	65	
Dyson, T. W Ellis, John	400 6	1	70 00	
Ellis, Richard, J	347 8	50 407	60	
French, Jno. J	277 8	382 50 10	15	
Gondro, A	155 (00	90	
Hamilton, C. DHill, MiltonDisbursements	332	16 60	05 35	
enks, Jas	277 5	340	10	
Ohnson, A	305 (286 1	20 00	
Disbursements		325 525		
Disbursements	345 0	368 368	60	
facdonald, S. C	1,300 0	2,124	91	
Asson, Basil	227 5	30 2 49	10	
filligan, Frank	250 0	273	60	
Intgomery, Alex	405 0 17 5	422	5 0	
AcCammon, Gordon	350 0 35 4		40	
Carried forward		10,968	41	274,776 37

Name.	\$ c.	\$ c.	\$ c.
Brought forward		10,968 41	274,776 37
Forest Reserve.—Continued.		,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Temagami Reserve.—Continued.			
McGregor, Peter	475 00		
Disbursements.	9 20	484 20	
McLean, Jas. M	330 00	404 20	
Disbursements		353 80	
Parke, T. F	350 00		
Disbursements	40 65	200 05	
Petrant, Wm		390 65 400 00	
Pratt, Henry L	270 00	200	
Disbursements	23 10	293 10	
Prudholmme, Adolph	392 50	283 10	
Disbursements	37 80	100.00	
Ranger, T	310 00	430 3 0	
Disbursements	11 70		
		321 70	
Reed, Wm Disbursements	347 50 23 60		
	20 00	371 10	
Rochefort, Patrice			
Disbursements	3 10	148 10	
Rochon, Jos		475 00	
Rodden, Jno. J			
Disbursements	3 10	233 10	
Ross, Douglas H	317 50		
Disbursements	19 05	336 55	
Shields, W. J	370 00	330 33	
Disbursements	. 3 70	080 80	
Shortt, W. F	120 00	373 70	
Disbursements	20 80		
Smith Evanle I	040.00	140 80	
Smith, Frank L	340 00 26 35		
		366 35	
Smith, G. H. G		$\begin{array}{c} 1 & 00 \\ 1 & 00 \end{array}$	
Stairs, G		312 50	
Turner, Jos		75 00	
Tufts, Robt Tytler, Norman B	330 00	25 00	
Disbursements	17 65		
Vivorusia D		347 65	
Vivervais, D	402 50 8 70		
	I ————	411 20	
Williams, Chas	307 50		
Typoursements	3 70	311 20	
Carried forward		17,571 41	274,776 37
Carried Jorward	1	11,011 41	217,110 31

Name.	\$ c.	\$ c.	\$ c.
Brought forward		17,571 41	274,776 37
Forest Reserve Continued.			
Temagami Reserve.—Continued			
Voodhouse, R	255 00 12 30	1 00	
Metogami Reserve.		267 30	
Burden, Jno	664 00 518 06	1 100 04	
Chanabois, Sandy	345 00 25 90	1,182 06 232 50	
Duff, Alex. C	347 50 25 40	370 90	
Goldie, D. M	312 50 25 90	372 90	
Haywood, A. K	337 50 28 15	338 40	
Hill, Harold O	335 00 25 90	365 65	
Hunter, Frank	$\begin{array}{c} 372 \ 50 \\ 26 \ 35 \end{array}$	360 90	
Kennedy, Gordon M	355 00 29 15	398 85	
Kent, Hubert	410 00 27 90	384 15	
Kersey, Robert R	330 00 24 80	437 90	
Quail, James	345 00 27 40	354 80	
Robertson, A. D	307 50 26 55	372 40	
Ryerson, E. E	345 00 23 90	334 05	
Stutt, H. G. Disbursements	325 00 31 45	368 90 ·	
Webb, C. E Disbursements	$\begin{array}{c} 335 \ 00 \\ 26 \ 65 \end{array}$	356 45	
		361 65	

		1	1
Name.	\$ c.	\$ c.	\$ c.
Brought forward		24,432 17	274.776 37
Forest Reserve.—Continued. Mississaga Reserve.			
Albright, Lewis Disbursements	372 50 19 00	007.70	
Darroch, John	212 50 15 90	391 50	
Dey, W. F	197 50 18 60	228 40	
Hall, Morton E Disbursements	35 5 00 26 15	216 10	
James, G. Albert Disbursements	317 50 14 65	381 15	
Keys, W. Ralph	362 50 26 50	332 15	;
Kinney, Wm	656 00 430 99	389 00	
Kroll, Victor	365 00	1,086 99	
Disbursements. Lee, Jas. W	$\begin{array}{r} 23 \ 90 \\ \hline 232 \ 50 \\ \end{array}$	388 90	
DisbursementsLipman, Arthur	$\frac{30\ 10}{362\ 50}$	262 60	
Disbursements	$\frac{33\ 70}{287\ 50}$	396 20	
Disbursements	14 75 337 50	302 25	
Disbursements	13 95	351 45	
Disbursements	355 00 35 45	390 45	
Metcalfe, N. E Disbursements	197 50 25 00	222 50	
Moorehouse, V. H. K	295 0 0 23 90	318 90	
Omelia, H. S	$\begin{array}{r} 365 \ 00 \\ 25 \ 90 \\ \end{array}$	390 90	
Playfair, A. W	290 00 12 10	302 10	
Richardson, Lorne W	292 50 17 85		
Carried forward			274,776 37
		310 35 31,094 06	274,776 37

Name.	\$ c.	\$	с.	\$ c
Brought forward		31,094	06	274,776 37
Forest Reserve.—Continued.				
Mississaga Reserve.—Continued.				
Westby, W. R	87 50 86 95	174	15	
Nepigon Reserve.		174	40	
Adams, W. F. Morris	292 50 69 10	261	60	
Armstrong, W. H	285 00 56 05	361 341		
Bonnycastle, R. H	335 00 57 30	392		
Burns, W. S Disbursements	290 00 71 10			
Dowling, Chas	285 00 61 30	361 346		
Orope, Harry E Disbursements	292 50 61 85			
Evans, R. Ramsay	195 00 53 10	354		
Giffler, W. G Disbursements	162 50 8 00	248		
Helliwell, Paul Disbursements	320 00 60 60	170		
Holton, Geo. H	297 50 73 60	380		
Leitch, Peter A	1,131 25 1,444 36		10	
Lunney, J. W	297 50 74 90	2,575 37 2		
Marter, Fred M	24 2 50 59 10			
Moyer, L. Clare	317 50 68 50	301		
McNeil, E. H. Disbursements	242 50 43 80	286		
Nesbitt, M. Disbursements	232 50 55 80	288		
		288		274,776 3

Name.	\$ c.	\$ c.	\$ c.
Brought forward	•••••	38,805 72	274,776 37
Forest Reserve.—Continued.			
Nepigon Reserve.—Continued.			
Poisson, Paul	300 00 68 80		
Robertson, Fred. A	320 00 58 10		
Stirrett, J. T	337 50 42 10)	
Tichborne, A	232 50 51 40		
Eastern Reserve.		283 90	0
Godkin, J. A	265 00 14 40		
Mills, S. G	300 00 18 40	279 40	
McGregor, Chas	400 00 33 30		
Sibley Reserve		433 30	
Oliver, J. A		100 00	41,884 72
Surveys			. 162,479 91
BOARD OF SURVEYORS			200 00
GILLIES LIMITS.*	· · · · · · · · · · · · · · · · · · ·		30,686 60
MINERAL COLLECTIONS			70 00
Refunds			23,621 06
Contingencies.			
Bureau of Mines.			
Printing and Binding	2,319 80 3,147 66		
Postage Telegraphing Express and cartage	372 48 273 64 128 77	5,467 46	
Advertising	3,047 02 103 95	774 89	
Carried forward	3,150 97	6,212 35	533,718 66

APPENDIX No. 6.—Concluded.

Name.	\$ c.	\$ 6.	\$ c.
Brought forward	3,150 97	6,242 35	533,718 66
Contingencies. — Continued.			
Bureau of Mines.—Continued.			
BooksMaps	530 84 871 53		
Gibson, Thos. W., traveling expenses	41 27 106 42	'	
Typewriter repairs, etc	12 50 3 45)	
Extra clerks	250 00 226 34 124 90 500 00 30 60	3,118 29	
Departmental.		1,131 84	15,209 46
Printing and binding	2,982 47 6,895 11		
Postage Express	2,257 76 305 21		
Telegraphing Telephone messages Telephone rent Cab hire Car fare	584 67 18 25 30 00 3 50 70 00		
Subscriptions	233 15 7,751 29		
Typewriter, rents and repairs	18 60 101 17 5 50		
Extra clerks	25 00 66 05		
-		91 05	29,671 71 578,599 83

D. GEO. ROSS, Accountant.

APPENDIX No. 7.

STATEMENT of Expenses on account of various Services, under the direction of the Department of Lands, Forests and Mines, for the year 1907.

Name.	\$	c.	\$	c.	\$ 0	c.
DIAMOND DRILL.						
Roche, E. K., salary	1,749 140	96 59	1 000			
			1,890	55		
Mackenzie, R. J., salary	190 241		431	75		
Mary and American	040	477	101			
MacVicar, J. A., salary	643		856	89	4	
Labor	3,599	45				
Freight, express, etc	359	58				
Advertising		0 3	3,964	06		
SuppliesCarbons	$1,865 \\ 3,424$					
Drill furnishings	904		6,195	70		
			0,193		13,339 ()3
Mining Schools					1,155 4	16
Algonquin Park					11,166	46
RONDEAU PARK					3,5 0 8 9	96
TEMAGAMI TIMBER CUTTING					1,560	10
English Journalists					3,376	4 9
VETERANS' COMMUTATION					46,850 (00
Canadian Mining Institute					1,000 (00
					81,956	50

D. GEO. ROSS,
Accountant.

APPENDIX No. 8.

WOODS AND FORESTS.

Statement of revenue collected during year ending December 31st, 1907.

	\$ c.
Amount of western collections at department do do Quebec do of Belleville collections. do of Ottawa collections.	
	\$1,219,051 32

J. A. G. CROZIER, Chief Clerk in charge. AUBREY WHITE,
Deputy Minister.

APPENDIX No. 9..

PATENTS BRANCH.

Statement of Patents, etc., issued by the Patents Branch during the year 1907.

Crown Lands	67
School do	4
Mining do	28
Public do (Late Clergy Reserves)	1
Free Grant Lands (A.A.)	9
do (nnder Act of 1880)	32
Rainy River Lands (Mining and Crown) Mining Leases Licenses of Occupation	14
Wining Leases	Ē
Gigenses of Occupation	ĩ
Rondean Harbor Leages	•
Rondeau Harbor Leases Crown Leases	1
Crown Lands (University) Patents	2
JIOWH Dattes (University) Laterits.	
Under Act of 1901 (Veteráns). Temagami Leases	1,02
remagami Leases	
Pine Patents	
-	
Total	2,73

CHARLES S. JONES, Chief Clerk.

APPENDIX

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

	Area					QuA	ANTITY AND
Agencies.	covered by		Saw lo	gs.		Boom	and Dimen
	timber license	Pin	ne.	Oth	ner.	Pin	ne.
	Square miles.	Pieces.	Feet B. M.	Pieces.	Feet B.M.	Pieces.	Feet B. M.
Western Timber District Belleville Timber District Ottawa Timber District	$ \begin{array}{c c} 11,741\frac{3}{4} \\ 1,233\frac{1}{2} \end{array} $		556,957,014 27,169,200 153,886,264 738,012,478	342,561 274,301	, ,	257,554 3,883 28,218 299,655	1,013,446

GENERAL STATEMENT

			Cord	wood.		Ties.			
Agencies.	Ce	dar.	Hard.	Soft.	Tan Bark	Railway	Posts.	Telegraph Poles.	
	Pieces.	Lineal feet.	Cords.	Cords.	Cords.	Pieces.	Cords.	Pieces.	
Western Timber District Belleville Timber	5,051	147,421	11,379	17,116	20,156	1,958,683	118	4,847	
District					112	13,814	163	6,128	
Ottawa Timber District		2,305	454	6,581		15,043	119	4,806	
	5,051	149,726	11,833	23,697	20,268	1,987,540	400	15,781	

J. A. G. CROZIER,

Chief Clerk in Charge.

No. 10.

FORESTS.

Rent, and Bonus during the year ending 31st December, 1907.

DESCRIPTION OF TIMBER.

sion Tim	Square	Timber	:.		Pine.	Piles.	Pile Timber.			
0	ther.	Pi	ne.	Ash,	Biro Eln	ch and	Time. Times.		The Timber.	
Pieces.	Feet B. M.	Pieces.	Cubic feet.	Piece	8.	Cubic Feet.	Lineal Feet.	Lineal feet.	Pieces.	Feet B. M.
40,179	6,348,095	20,120	1,053,187	Ash Birch Elm	66 16 1	1,772 642 41		218,128	2,247	193,386
5,119 6,902	'						779			
52,200	7,842,841	20,120	1,053,187	Ash Birch Elm	66 16 1	1,772 642 41		218,128	2,247	193,386

OF TIMBER.—Continued.

Stave Bolts.	Pulpwood.		Amounts Accrued.												
Cords.	Cords.		Transfer bonus. Interest. Tre		Trespa	Timber dues. Bon			Bonus.	Ground rent.	Total.				
		\$	c.	\$	c.	\$	c.	\$	c.	\$ c.	\$ c.	\$	c.		
3,148	67,080	2,179	10	3,303	45	12,592	62	1,035,427	03	214,267 30	41,727 00	1,309,496	50		
:	45	81	10	283	79	708	62	37,430	62		4,074 00	42,578	13		
	4,010	700	75	73	94	1,459	60	179,531	44		19,217 00	200,982	73		
3,148	71,135	2,960	95	3,661	18	14,760	84	1,252,389	09	214,267 30	65,018 00	1,553 057	3 6		
											•	1			

APPENDIX No. 11.

STATEMENT of the work done in the Military Branch of the Department of Lands, Forests and Mines, during the year 1907.

Letters received	
do written	
Mans issued in connection with	certificates
Forms issued	certificates
Location Certificates issued	
Surrenders	
References for Patents issued	

R. H. BROWNE, Clerk in Charge. AUBREY WHITE,
Deputy Minister.

APPENDIX No. 12.

Statement of the number of Letters received and mailed by the Department in 1905, 1906 and 1907.

Year.		Letters received.							and
	Sales and Free Grants.	Surveys.	Woods and Forests.	Mines.	Totals.	Names indexed.	Orders-in-Council	Returned Letters.	Letters, circulars reports mailed i Department.
1905 1906 1907	19,932 21,525 24,871	8,018 11,490 13,463	7,126 9,620 9,218	4,000 7,702 10,060	46,220 50,337 57,612	53,100 59,250 63,120	220 262 284	60 80 92	55,400 60,000 66,000

FRANK YEIGH,
Registrar.

Appendix No. 13.

STATEMENT showing the number of Locatees and of acres located, of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties; and of patents issued under "The Free Grants and Homesteads Act," during the year 1907.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Baxter	Muskoka	J. B. Brown, Bracebridge	13	1,484	14	86	8	
Brunel	l "	,,,	1 2	200			2	
Cardwell	"	"	4	508			5	, .
Chaffey		44 44	6	695			7	1
Draper		44 44	J · · · · · · · ·					
Franklin		46 66	4	494	4		7	5
Macaulay		16 16		200	•••			• • • •
Medora			3	$\frac{300}{127}$			4	7
Monck Morrison	,,	"	2	387	7	98	3	1
Muskoka	"		2	187	4		2	
McLean	"	"	15	1,877	1		20	
Oakley			3	309	_			3
Ridout	"	"	14	1,757	1	14	18	2
Ryde	"	"	2	676			5	2
Sherbourne	Haliburton	"	6					$egin{array}{c} 2 \ 2 \ 2 \end{array}$
Sinclair	Muskoka	"	9	1,546	1	47	11	3
Stephenson	"	"	1	85			7	
Stisted	"		3	392			5	14
Watt,	"	66 66	1	103			1	
Wood	"	" "	8	1,283			7	6
Q	D		_	001	-	50	10	
Christia	Parry Sound	F. R. Powell, Parry Sound	- 5	901	7	59	10	16
Christie	"	"	10	$1,226 \\ 1,296$	3	271	9 6	1
Conger,	"	"	10	' 1	1	$\frac{271}{8\frac{1}{2}}$	- 1	9
Ferguson	" …	"	2	301				3
Foley	"	"	$\frac{2}{4}$	550	3	85	2	11
Hagerman	"		4	537	4	282	6	4
Humphry	"		2	263	1	$1\frac{1}{2}$	2	$\frac{1}{2}$
Harrison	"				17	502		
McConkey		"	5	673	2	133	5	····ż
M'Dougall	"	"	7	783	6	19	5	$\overline{9}$
McKellar	"	11	1	200				
McKenzie	"	"	5	797	3	14	5	3
Monteith	"	"	8	1,075	3	114	5	6
Shawanaga		66 66 66 66	1	208	18	64		21
Wilson	•••••	**	5	902			4	4
Chapman	4.6	D. I.S. Frankern Macana	1					
Onapman		Dr. J.S. Freeborn, Magane- tawan.	4	338	4	131	3	7
Croft	"	tawaii	6	583	3	78	8	3
Ferrie	"		3	295		,,,	4	1
Gurd	"	"	9	1,137	2	27	6	4
Lount	"	"	5	686	6	19	4	10
Machar	"	"	28	3,948			18	5
Mills	"	44	7	1,029	2	132	3	4
Pringle	"	" "	2	421				1
Ryerson	4.6	"	6.	680	1	100	5	4
Spence	"	44 44	5		ا إ		5	3
Strong			5	500		1	4	4
			1					

Appendix No. 13.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Armour	Parry Sound	E. Handy, Emsdale	2 5 5 11 3 1	309 658 880 1,375 400 100	2 2 2	43 110 200	3 15 4 7	. 3
Chisholm Hardy Himsworth Laurier Nipissing Patterson	Nipissing Parry Sound	J. S. Scarlett, Powassan	15 4 26 11 10 4	1,922 687 4,356 1,817 1,210 592	6 6 2 6 1	65 77 15 32 20	5 4 28 12 11	- 6
Anson	Haliburton	R. H. Baker, Minden """ """ """" """" """" """" """"	1 1 3 2 5 2	96 98 151 389 183 505 160	 1 2	4 4	1 8 2 4 2 4 1	1 3 7
Austruther Burleigh, N.D. 'S.D. Chandos Methuen	Peterboro	T. G. Eastland, Apsley	1 4 1 2 1	100 440 86 292 100	2 2	78 29	 3 1	4 1 2 1
Cavendish Galway	"	Jas. Wilson, Kinmount	3 1	204 111		3	6 1	1 3
Cardiff	Haliburton Hastings	J. H. Anderson, Tory Hill "" "" "" "" "" "" ""	3 7 3 4 6	387 497 325 543 890	 3 1 1	48 4 22	3 6 5	3 5 1 5 2
Carlow Cashel Dungannon Faraday Herschel Limerick Mayo Monteagle Wollaston		J. R. Tait, L'Amable """""""""""""""""""""""""""""""""	2 2 3 6 4 7 7	288 200 201 654 516 1,057 748	····· 2	219	 1 4 7 1 5 6	1 2 2 3 4
Algona, S " N Brougham Brudenell Burns Grattan	Renfrew	Adam Prince, Wilno	2 1 3 10	290 204 407 1,010	4 5	103	3 1 5 	1 1 1

Appendix No. 13.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed	No. of patents issued.
Griffith Hagarty Jones Lyell Lyndoch Matawatchan Radcliffe. Raglan Richards Sebastopol Sherwood	Nipissing Renfrew	Adam Prince, Wilno	10 4 7 4 13 2 11 4 17		3 2 1 1 2	73 37 4 11	4 1 2 1 1	6 3 1 3 2 3 2 4
Milberforce Alice	Renfrew	D. B. Warren, Pembroke	1 4 3 2		2	133	1 1 2	2 3 1 4
Bonfield Boulter (pt) Calvin Cameron (pt). Ferris Lauder (pt) Mattawan Papineau	66	J. M. Deacon, Mattawa	13 11 6 5	1,453 1,0 6 9	2 1 1 2	8	8	2 5
Rorah	Algoma	H. N. Young, S. Ste. Marie	$\frac{1}{7}$	156 1,040 331		19	8	1 3
do add. St. Joseph Isl'd		W. E. Whybourne, Marksville	15	1,669	5	103	19	3
Blake	 	H. A. Keefer, Port Arthur. '' '' '' '' '' '' '' '' ''		1,990 352 4,455 1,284 3,365 2,565 2,518 2,786	3 1 1 1 4 3 3 1	160 173 182 168	2 0 28 10 29 2 29 2 20 13	5 2 4 4 9

Appendix No. 13.—Continued.

Township.	District or County.	District or Agent.		No. of persons located.	No. of acress located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
010	701 I. D	II A 17 . 6.	D. t. d.	97	4.050	0	004		
Oliver	Thunder Bay	H. A Keefer,	Port Arthur	27 8	$\frac{4,270}{1,243}$	9	684	6	9
Paipoonge N. R.	. "	"	"	6	652			9	. 1
" S.R	"	"	"	11	1,256	3	210	12	4
Pardee	"	"	"						
Pearson				17	2,731	1	179	25	5
Scoble			"	7	1,072	2	13	8	4
Strange				10	1,516	2	2 6	18	5
Atwood	Rainy River	Wm. Campbel	l, Stratton.						
Blue	""	" Campion	1, 1501400011.	23	3,681	6	248	25	5
Curran	"		"	5	814			6	1
Dewart	4.6	"	44	1	205	1	35		7
Dilke	"	"	"	1	60	3	137	1	-3
Morley	"		"	2	203	2	44	2	4
McCrosson	44		"	23	3,505	1	124	21	5
Nelles Pattullo	"	"	"	12	1,858 885	8	$\frac{266}{128}$	12 6	5 6
Roseberry	"	"		1	000		120	۷	U
Shenstone	4.6	"	"	2	342	6	180	3	7
Spohn	"	"	"	16	2,433	1	17	5	9
Sutherland	4.6	4.6	"	13	2,202]		8	5
Sifton	"	"	"	2	320	2	230	3	6
Tait	"		"	14	2,045	2	6	8	12
Tovell	**	"	"	40	6,539	4	271	15	5
Worthington .	••			-		5	257	• • • •	• • • •
Aylsworth	"	Alex. McFayo	len, Emo	3	454	2	369	2	7
Barwick	"	","	"			٦.	000		
Burriss	4.6	""	""	16	2,495	5	234	18	7
Carpenter	"	"	"	11	1,818	7	132	10	12
Crozier	"	"	"	10	1,506	4	188	6	1
Dance	"	"		27	4,307	3	240	8	1
Devlin	"		"	2	324	2	44	2	6
Dobie	**	"		6	967	5	298	10	5
Fleming Kingsford	"	"	"	19	3,104	4	78	18	6
Lash	"	"	"	6	972	6	14	8	9
Mather	"	4.4	• •	9	1,453	10	536	8	13
Miscampbell	"	"	"	15	2,374	1	41	14	6
	"	"					_		_
Potts	"	"	"	6	966	1	1	5	3
Pratt		"		10	1,613	3	130	8	4
Roddick			4.6	1	$\frac{160}{159}$.	···i	40	2	$\frac{2}{2}$
Richardson	"	"	"	1	7 = 4		10	1	1
	"	D II D					00.5		
Aubrey	"	R. H. Prouger	r, Dryden .	14	1,887	9	935	2	8
Eton	"	"	"	12	1,743	1	40	2	7
Langton	"	"	"				• • • • • •	• • • • •	• • •
Rugby	"	"	**	9	1,388		200	2	$\ddot{7}$
Vanhorne	"	"	"	10	1,495	4	280	2	6
					,	-	_00		ŭ

Appendix No. 13.—Concluded.

Township.	District or County.	Agent.		No. of persons located.	No. of acres located.	No, of purchasers.	No. of acres sold.	No of lots resumed.	No. of patents issued.
Wainwright Zealand	Rainy River	R. H. Pronger,	Dryden .	10 5	1,271 520	2 6	240 635	1	
Melick Pellatt	""	C. W. Belyea, K	enora	8	1,227	6 3			3
Balfour Blezard Broder Capreol W. ½ Chapleau Hanmer Garson Neelon Rayside	 Algoma	J. K. MacLennar	n, Sudbury	3 12 4 18 3 10 7 7	454 1,687 653 2,205 405 1,323 1,110 996	2 2 1 1 4 1 2	27 28 2 22 92		2 9
ApplebyCasimirDunnetHagarJenningsKirkpatrickRatter	"	E. A. Wright, W.	Varren	1	161	3 2 1 1 1	316 160 156		
Cosby	Sudbury Nipissing Sudbury Nipissing	J. A. Philion, Stu	 			3 2 4	260 480		
Abinger	Addington Frontenac Lennox and	Chas. Both, Den		2 2	200 248	····i			1
	Addington Frontenac	CC CC CC		1 1 1	100				1
		Total		1,282	180,864	393	16,608	970	736

W. C. CAIN, Clerk in Charge.

APPENDIX No. 14.

Statement of Municipal Surveys for which instructions issued during the year 1907.

No.	Name of Sur- & veyor.	No.	IDate of Instructions.	Description of Survey.	Date when confirmed R. S. O., 1897, Cap. 181, secs. 10 to 15 inclusive.
1	H. J. Bowman	660	August 7, 1907.	To survey the original road allowance between the 3rd and 4th concessions of the township of Garafraxa, situate between the east, otherwise called the northeast halves of lots 11, 12 and 13, in the 3rd concession, and the west, otherwise called the southwest halves of lots 11, 12 and 13, in the 4th concession, of the said township, and to have the said road allowance marked by permanent stone or iron boundaries; and if the original monuments cannot be found at the corners of these lots to make the survey	
2	Thos. Byrne	661	September 24, 1907	between the nearest undisputed points on said road allowance.	
3	E. T. Wilkie	662	October 3, 1907	has been forwarded to this Department by the Municipal Council of Blind River. To survey the line between lots 5 and 6, concession 3, in the township of Hinchinbrooke, in the county of Frontenac, and to plant permanent monuments at the front and rear angles of said line.	·

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister Lands and Forests.

APPENDIX No. 15.

Statement of Municipal Surveys confirmed during the year 1907.

No.	Name of Surveyor.	No.	Date of 3 Instructions.		Date when confirmed under R. S. O., 1897, chap. 181, sees. 10 to 15 inclusive.
1	A. S. Code	6 59	March 23, 1907	To survey the allowance for road between the rear of lots on the Middle Road and the 3rd concession extending from the town line between the townships of Aldborough and Orford, northwesterly across lots 1, 2 and part of 3, to a point where the deviation of the concession road allowance between the 3rd and 4th concessions of Orford strikes said road allowance in rear of the lots along the Middle Road, and to have the said road allowance marked on either side by permanent monuments.	October 14th, 1907.

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister Lands and Forests.

APPENDIX No. 16.

Statement of Crown Surveys in progress during the year 1907.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.
1	May 31, 1906.	J. J. Francis	Survey of township of Temple, District of	\$ c.
2	July 10, 1907.	J. H. Burd	Rainy River Survey of township of Jamieson, District	1,500 00
3	July 10, 1907.	J. H. Burd	of AlgomaSurvey of township of Jessop, District of	1,750 00
4	May 6, 1907.	Thomas Bryne	Algoma	1,750 00
		•	Nipissing	2,000 00
5	May 6, 1907.	Walter Beatty	Survey of township of Devitt, District of Algoma	3,800 00
6	May 6, 1907.	Walter Beatty	Survey of township of Staunton, District of Algoma	3,800 00
7	May 6, 1907.	E. D. Bolton	Survey of township of Reaume, District of Algoma	1,700 00
8	May 30, 1907.	J. S. Dobie	Survey of 3 blocks Thunder Ray branch, G.T.P. Ry., Rainy River	5,550 00
9	May 25, 1907.	T. Fawcett	Survey of 4 blocks Thunder Bay branch,	
10	May 20, 1907.	W. Galbraith	G.T.P. Ry., Thunder Bay Survey of township of Leitch, District of	6,450 00
11	May 30, 1907.	J. J. Dalton	Algonia	4,000 00
12	May 20, 1907.	T. H. Dunn	G.T.P. Ry., Rainy River	3,000 00
13	May 20, 1907.	T. H. Dunn	Algoma	2,650 00
14	June 16, 1907.	T. D. Green	Algoma	2,000 00
	, i		of Algoma	2,450 00
15	June 16, 1907.	T. D. Green	Survey of township of Godfrey, District of Algoma	1,250 00
16	May 6, 1907.	Jas. Hutcheon	Survey of township of Barker, District of Algoma	2,800 00
17	May 6, 1907.	Jas. Hutcheon	Survey of township of Eibler, District of Algoma	2,800 00
18	May 27, 1907.	L. V. Rorke	Survey of township outlines west of Mon- treal River, District of Nipissing	7,500 00
19	Dec. 9, 1906.	J. Cozens	Survey of boundary, timber berth 22, range 10, north of Curtis, District of	
20	Oct. 21, 1907.	J. H. Smith	Algoma	950 00
21	April 18, 1907.		Nipissing Survey of timber berths in Rainy River	500 00
			District	1,000 00
22	May 15, 1907.	A. F. Wells	Survey of township of Kennedy, District of Nipissing	4,500 00
		1		\$63,700 00

GEORGE B. KIRKPATRICK, Director of Surveys. AUBREY WHITE, Deputy Minister Lands and Forests.

APPENDIX No. 17.

Statement of Crown Lands surveyed, completed and closed during the year 1907.

Number.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of acres.
1	May 15th, 1906	Walter Beatty	Survey of township of Gallagher,	\$ c.	00.050
2	May 15th, 1906	Walter Beatty	District of Algoma	246 32	23,079
3	May 15th, 1906	W. Galbraith	District of Algoma	76 76	22,522
4	June 11th, 1906	T. J. Patten	trict of AlgomaSurvey of portion of boundary be-	187 30	51,873
5	June 11th, 1906	T. J. Patten	tween Ontario and Quebec Survey of township of Bowyer, Dis-	$3,087 \ 73\frac{1}{2}$	
6	July 6th, 1906	E. Seager	survey of township of Redditt, Dis-	2,010 10	22,935
7	Dec. 29th, 1906	De Morest & Stull.	trict of Rainy River	429 68	23,1831
0	T 1041 1007	W W G4-11	WD 2, south of Ridout, District of Algoma.	1,251 69	
		W. W. Stull	Survey of water power on Sable River, District of Algoma	65 50	
		Speight and Van Nostrand	Survey of timber berths west of Onaping Lake, District of Algoma	1,414 85	
		L. V. Rorke	Survey of residue of township of Coleman, District of Nipissing	1,481 80	14,818
11	April 18th, 1907	E. Seager	Survey of timber berths on Eagle and Clear Water Lakes, District of		
12	May 6th, 1907	Speight and Van	Rainy RiverSurvey of base and meridian lines,	853 70	
13	May 6th, 1907	Nostrand James L. Morris	District of AlgomaSurvey of township of McCowan	13,503 23	51 009
14	May 6th, 1907	Alex. Niven	District of Algoma Survey of boundary between Territorial Districts of Algoma and	5,190 30	51,903
15	May 6th 1907	H I Reatty	Thunder BaySurvey of township of McCrae, Dis-	9,000 00	
			trict of Algoma	5,185 10	51,851
			trict of Nipissing Survey of township of Colquboun,	3,220 56	23,004
			District of Algoma	5,611 50	51,615
			Survey of the township of Glack- meyer, District of Nipissing	6,071 60	51,718
			Survey of the township of Kendrey, District of Algoma	6,066 90	51,659
20	May 31st, 1907	Demorest & Stuff.	Survey of two blocks of timber south of Windemere Lake, Dis-		
21	June 11th, 1907	J. J. Newman	trict of AlgomaSurvey of base and meridian lines near Larder Lake, District of	958 08	
22	June 11th, 1907	T. J. Patten	Nipissing	1,294 18	
23	June 11th, 1907	J. J. Newman	vis to Int. boundary)	1,236 12	
		James Dickson	1 I	8,163 65 2,798 73	
25 26		J. W. Fitzgerald	Transport of three canoes Survey of township of Macdiarmid,	11 25	99 000
27	July 17th, 1907	L. O. Clarke	District of Algona		23,088
			· Nipissing	471 04	

APPENDIX No. 17.—Concluded.

Number.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amou paid		No. of acres.
			Survey of township of Purvis, District of Nipissing	2,708		15,746
			of Rainy River	2,211 864		
	June 10th,1907		To survey north boundary of Mulligan and boundary between Skead and Rattray	621	30	
32		James Dickson	Amount for canoe purchased from A. J. Cameron	40 509		
			ing maps	7,747 410		
			on lot 9, con. 6, Macaulay	$\frac{25}{5}$		
			of Thos. Fletcher, of O.L.S. Code's party	136 78		
				98,779	91	478,9941

GEORGE B. KIRKPATRICK,

AUBREY WHITE,

Director of Surveys.

Deputy Minister of Lands and Forests.

(Appendix No. 18.)

BOUNDARY LINE BETWEEN ALGOMA AND THUNDER BAY, NORTH OF CANADIAN
PACIFIC RAILWAY

Toronto, November 28th, 1907.

Sir,—I have the honor to submit the following report on the survey of one hundred and twenty miles of the boundary line between the Districts of Algoma and Thunder Bay from its intersection with the Canadian Pacific Railway due north towards the Albany River, under instructions from your Department, dated, the 6th of May, 1907.

I left Toronto on the fourth of June last and proceeded to White River Station on the Canadian Pacific Railway, the initial point of my survey, being about three miles west of that place, at the centre line of the said railway's right of way, where it is intersected by the meridian of eighty-degrees twenty minutes west longitude, as laid down by Ontario Land Surveyor, Thomas B. Speight, in October, 1902, said point of intersection being in latitude forty-eight degrees, thirty-six minutes and forty seconds north.

After obtaining the necessary observations I commenced the survey on the 7th of June and ran north astronomically from day to day until the 7th of September when the work was discontinued at the end of the one hundred and twentieth mile, the reason for this being that a number of the men in my employ were out of footwear and as the country was very wet from the almost continuous rainfall of the summer they refused to go farther.

After caching the remainder of my supplies (about twenty-five hundred pounds), I returned via the English River, Long Lake and the Pic River to the Canadian Pacific Railway at Heron Bay, arriving there on the 20th of September and at Toronto two days later.

I had a party of twenty-six all told, six of them being Indians and these were almost the whole time engaged in canoeing supplies from Montizambert to Obakamaga Lake and from Heron Bay to English River where the line was to cross these waters. About ten of the men were engaged in packing the supplies and moving the camp outfit along the line. My assistant was Walter Smith, O.L.S. of Lindsay and Mr. A. L. Parsons of Toronto University accompanied the party as geologist.

The survey was made in accordance with instructions in every particular. An iron post one and seven-eighths inches in diameter and three feet in length marked "Algoma" on the east, "Thunder Bay" on the west and "R" on the south was planted along side a pitch pine post, similarly marked, six inches square and four and a half feet high in a stone mound at a distance of two_chains and twenty-four links north of the centre line of the railway on the northern limit of the right of way being one hundred feet from the centre line measured at right angles therefrom.

Wooden posts were planted at the end of every mile marked with a scribe iron, the number of the miles on the south side, "A" on the east side and "T.B." on the west side, and at the end of every six miles an iron post was planted alongside the wooden post similarly marked with a cold chisel, stone mounds were built around all posts whenever stones could be obtained and bearing trees taken, marked "B.T." and distance and direction noted from the post wherever there were trees standing.

Where the end of a mile came in a lake or river, the posts were planted on the nearest land and distance noted. The line was well cut out and well blazed.

Observations for Azimuth were frequently taken. The magnetic variation of the needle was fairly steady at from two to four degrees west.

GENERAL DESCRIPTION.

The line for the first seventy-five miles passed through a rough rocky and broken country of little value for agricultural purposes. Hills from two hundred to four hundred feet and sometimes more in height were often met with. Large areas have been burnt over and timber blown down in many places making the work of getting a line through it or over it very difficult and the packing of supplies along the line a very expensive matter.

Some groves of banksian pine (often called pitch or jack pine) fit for railway ties were met with, but as a rule the timber is not of much value along this part of the line. There is, however, a considerable amount of spruce fit for pulpwood in the swamps between the hills.

The height of land between Lake Superior and Hudson's Bay was crossed

on the thirty-first mile, a few chains south of Obakamaga Lake.

The clay belt was entered on the eightieth mile and continued as far as the line was run, the timber being chiefly spruce from four to fourteen inches in diameter with tamarac, balm of Gilead, poplar, white birch and some cedar. There is not much of the latter however, in the country. It is mostly found along the rivers and creeks. Much of the land on these forty miles was covered with deep moss, but this can be easily burnt off as settlement takes place upon completion of the National Trans-continental Railway which was crossed on the ninety-seventh mile. No construction work has yet been done on this undertaking near the boundary line.

The Pegutchewan River was crossed on the seventy-ninth mile. It was over two chains wide and quite deep, flowing easterly with rapid current

and many rapids.

Flint River on the one hundred and twelfth mile about two chains in

width, joins the English River about two miles east of the line.

The English River was ten chains wide where the line crossed it at the end of the one hundred and twelfth mile flowing to the Albany with rapid current over limestone rock. On this river there are many rapids and falls making it difficult to ascend with canoes, the distance to Long Lake being about sixty miles up stream.

At the one hundred and twentieth mile the timber was spruce and tamarac

and smaller than farther south.

Numerous lakes were crossed on the first seventy-five miles of the line, many of them containing fish of the usual kinds, pike, pickerel, etc., speckled brook trout were met with in one stream on the thirty-ninth mile. Obakamaga Lake on the thirty-first mile is a beautiful lake of clear water flowing to the Albany River and is on the canoe route from Montizambert Station on the Canadian Pacific Railway to the Albany River and Hudson's Bay.

GAME.

Moose were frequently seen and a few cariboo. Partridge were not much in evidence, signs of fur bearing animals were often met with, otter, mink, marten, etc. The line passes through the trapping ground of the Indians

from the different reserves along the Canadian Pacific Railway and Lake Superior and Long Lake. A few bears were seen, but wolves were neither heard or seen.

I saw no white or red pine in the country along the line.

No minerals were met with. The Laurentian formation was the principal rock along the line. The first limestone met with was at the Flint and English Rivers. There were no heavy frosts during the survey and the finest weather we had was during the first and second weeks of September. I thing the remainder of the line to Albany River could be best run during the winter.

Herewith will be found the field notes and plan of survey and account

in triplicate.

I have the honor to be, Sir,

Your obedient servant,

(Signed) ALEXANDER NIVEN, Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto, Ont.

(Appendix No. 19.)

BASE AND MERIDIAN LINES, DISTRICT OF ALGOMA.

TORONTO, November 20th, 1907.

SIR,—We have the honor to submit the following report on the survey of certain base and meridian lines forming the outlines of townships nine miles square, lying between Missanabie River and the western boundary of the Territorial District of Algoma, made by us during the past summer, under instructions from your department, dated 6th of May, 1907.

The instructions were received on the 20th May, and we lost no time in completing the arrangement of details, but, owing to the unusually late opening of spring, it was found advisable to defer starting for a fortnight.

With ten men from the County of York and vicinity we set out from Toronto on the 5th of June and were joined by ten more men at Missanabie, from which point we went by canoe route about 150 miles to the starting point of the work. This journey was by way of Dog Lake, to the height of land and thence by Crooked Lake, Brunswick Lake and Missanabie River occupied from the 8th to the 18th of June and included twenty-eight portages.

We commenced the survey on the 19th of June, at the end of the ninth mile of our meridian line run last season, north astronomically, from the northeast angle of the township of Devitt, or the northwest angle of the township of Eilber. At the north end of this meridian, we found the tamarac post six inches square referred to in the instructions marked "IX" on the south side and we re-planted the post, marking thereon the names of the adjoining townships of Sisk, Sankey, Mulvey and Shannon. Beside the tamarac post we planted an iron post one and seven-eighth inches in diameter and marked the names of the above four townships on both posts.

Beginning the line at the northwest angle of the township of Sankey, we ran due east astronomically for a distance of nine miles on the chord of a parallel of latitude passing through the starting point, planting a

wooden post at the end of each mile with the number of the mile marked on the west side. At the end of ninth mile we planted, beside the wooden post, an iron one, similar to the above noted and marked on the proper side of both posts, the names of the townships of Sisk and Sankey.

Returning to our starting point we ran due west astronomically sixtythree miles of base line on nine mile chords of a parallel of latitude, planting a wooden post at the end of each mile, and at intervals of mine

miles, iron posts were planted in addition.

From the ends of the ninth, eighteenth, twenty-seventh, thirty-sixth, forty-fifth and fifty-fourth miles on this base line we ran meridian lines north and south, nine miles from the base line. On these lines, posts were planted at the end every one and one half miles corresponding with the depth of two concessions in the new system of township surveys and on these posts we marked the distance, north or south of the base line and at the end of the ninth mile of each meridian line we planted an iron post alongside the wooden post, so far as the supply of iron posts lasted. The south angles of the township of Studholme and the north angle of the township of Rogers were not marked by iron posts.

An exceptionally rainy season impeded the progress of the work and the desertion of three of the packers, near the end of the season, added to the disabling of two other men by accidents, so crippled our transport services that we were unable to continue the work over the large stretch included in the instructions. We, therefore ran—by using flying camps—the west boundaries of the townships of Gill and Auden, but were obliged to leave unrun the twenty-seven miles of base line necessary to connect with the boundary be-

tween the Territorial Districts of Algoma and Thunder Bay.

All lines run were well opened out and blazed, and bearing trees were blazed and noted.

Astronomical observations when required, were taken whenever the weather permitted, but during parts of the season the continuous cloudy and stormy weather rendered observations less frequent than was desirable. The observations were not in all cases entered in the field notes.

It may here be noted that the Azimuth Tables prepared by Mr. F. L. Blake for the Association of Ontario Land Surveyors and published in the

Annual Report for 1906 were found of great service.

GENERAL FEATURES.

The tract embraced by this survey is eighteen miles wide by seventy-two miles long, being sixteen large townships with a total area of one thousand two hundred and ninety-six square miles or eight hundred and twenty-nine thousand, four hundred and forty acres. It lies in the valleys of the Missanabie, Kabinagagami, and Nagagami Rivers and is distant from one hundred and twenty-five to one hundred and fifty miles by cance route north from that part of the Canadian Pacific Railway stretching from Missanabie Station to White River Station. Access is had by means of cance routes on the three rivers above named, but all require experienced cance-men for reasonable safe navigation.

The surface is slightly more undulating and high lying than that lying to the south and east reported upon by us last season and the swamps are smaller in extent, notwithstanding the exceptionally wet season of 1907. At a rough estimate fifty per cent, would be considered high lying, and, where wet, easily drained, the remainder being also good land, but requiring good drainage. The trend of the rivers being northward the general slope is in that direction, the undulations paralleling the rivers.

Soil.

The soil is chiefly clay and clay loam with rare instances of sandy ridges. With the exception of rapids in the rivers and the shores of the

larger lakes, few outcroppings of rock were seen.

Gravel was noted in one place and that in only small quantity. There is very little genuine muskeg, although the prevalence of moss would give one the impression that muskeg areas are numerous and large. As has been so frequently reported of the clay belt, the moss, resting as it does on solid clay, will readily be removed by fire when the land is required for settlement. Another feature noticed is the shallow hold, which the spruce and tamarac forest trees have upon the heavy clay soil, so that the removal of stumps and roots when the land has been cleared, will be easily effected. An example of this was seen near the north boundary of the township of Sankey, east of the Missanab e River, where a tract two or three miles in extent had been burned for the second time, probably two years ago, and the moss and stumps almost completely cleared away, showing an area of good clay soil apparently ready for the plough.

Drainage facilities will be found good as the numerous small streams tributory to the larger rivers have almost invariably a good rapid flow and

fairly straight courses.

TIMBER.

Much of the country in this region was swept by fire about forty years ago, as we were informed by an Indian employed by us on the survey, and this statement was borne out by the rings of annual growth on the present timber. This timber is, of course, of comparatively small size, the growth being unusually dense. Spruce, tamarac, white poplar, white birch, balsam, and balm of gilead form the chief varieties and are in the above order as to predominance. Where the original forest remains, the timber is of larger size, particularly for a distance of one or two miles back from the rivers, where it again becomes somewhat inferior in size and quality. The largest trees seen near the rivers measured three feet in diameter at the stumps, but as a rule the diameter is from twelve to twenty inches. A few cedars of inferior size and quality are found along the rivers and creeks.

WATER.

Several fair sized lakes were seen. The Pewabiska (White Water) stretches from near the northwest corner of the township of Casgrain, across the breadth of the township of Hanlan and about half of the township of Stoddart, in four large bodies of water connected by "Narrows." This lake which has not hitherto been shown on official maps, is dotted with islands and contains abundance of pike, pickerel and whitefish. Apart from this, few lakes of importance were found, numerous lakes not being a characteristic of the clay belt.

The three rivers mentioned are fairly well known as canoe routes and some day the numerous rapids and falls will be harnessed to furnish power and light. Taken in order of position from the east side of the tract surveyed, the main rivers are as follows:— The Missanabie, the Mattawishquia, the Pewabiska, the Kabinagagami, the Nagagami and Nagagamichi.

The Missanabie, flowing northerly across the townships of Sankey and Sisk, in a fine stream of good water, about five hundred feet in width and four

to ten feet in depth with clay banks from ten to fifteen feet high, its current at this part is estimated at from three to four miles an hour. Three large islands, known as Skunk Islands, are situate near the boundary between the two townships referred to.

The Mattawishquia crosses the south boundary of the township of Casgrain near its centre and, flowing in a devious north-easterly course, across the townships of Casgrain and Mulvey, joins the Missanabie about two and a half miles north of the south boundary of the township of Sankey. Its breadth is from two hundred to two hundred and fifty feet, and depth three to eight feet, with numerous rapids and good current generally. The clay banks on either side average eight to ten feet in height.

The Pewabiska River has three distinct branches with their sources apparently in the townships of Stoddart, Hanlan and Casgrain respectively, the lake expansions of the same name as the river occurring in those three townships. Below these lakes the river has a breadth of about two hundred feet with a depth of from five to six feet. It crosses the township of Ritchie in a north-easterly direction, and at a distance of about twenty-five miles north-eastward, enters the Missanabie.

The Kabinagagami, sometimes called the Mamattawan, enters the township of Studnolme about three miles west of its south-east angle, and flowing in a generally northward course, crosses the north boundary of the township of Fushimi, eventually emptying into English River at Mamattawan Post about thirty-five miles farther northwestward. The breadth of this stream is from three hundred to three hundred and fifty feet, and depth from four to ten feet, with banks from ten to fifteen feet high, and, unlike the Pewabiska, it has few islands and lake expansions.

The Nagagami, which runs in a generally north direction, crosses the townships of McMillan, Fintry and Auden. Its breadth is from two hundred to two hundred and fifty feet, and depth about four feet, with rapid current. In the southern part of the township of McMillan, the banks are the usual clay, ten to fifteen feet high, but within the next four miles they rise to an altitude of from one hundred and forty feet to one hundred and fifty feet, decreasing again to fifty feet where the east boundary of the township of Fintry is crossed.

The Nagagamichi, in the township of Gill, is a rapid stream from one hundred and eighty to two hundred feet in width, and four to six feet in depth. Rapids are numerous, and near the confluence with the Nagagami there is a fall of about fifty feet in height, the roar of which is heard at a distance of nine miles.

We have no doubt that when these rivers are explored water powers of considerable importance will be found and the presence of lake expansions will give guarantee in most instances of continuity by storage.

MINERALS.

With few exceptions, the rock formation noted is Huronian and no indications of economic minerals were seen.

GAME.

Moose, red deer and caribou were seen from time to time during the season, and bear, beaver and marten were fairly numerous. Nearly all the rivers and larger lakes contain fish in abundance, including pike, pickerel and white fish, with speckled trout in some of the smaller streams.

GENERAL REMARKS.

For agricultural purposes, the lands embraced by this season's survey are fully equal to that to the south and east reported upon by us last year, not less than seventy-five per cent. being good farm land, needing only clearing and in some cases draining.

The National Transcontinental Railway line has been located in the townships of Hanlan, Stoddart, Studholme, Gill and McMillan, and when

opened for traffic will give access to a vast area of fertile soil.

Accompanying this report, are a general plan, field notes and triplicate account.

We have the honor to be,

Sir, Your obedient servants,

> (Sgd.) Speight & Van Nostrand, Ontario Land Surveyors.

The Honorable,
The Minister of Lands, Forests and Mines,
Toronto.

(Appendix No. 20.)

BASE LINE EXTENDING FROM THE NORTH-EAST ANGLE OF THE TOWNSHIP OF PURVIS, DISTRICT OF NIPISSING, TO THE INTERPROVINCIAL BOUNDARY.

LITTLE CURRENT, Ont., November 15th, 1907.

SIR,—I have the honor to submit to you the following report on the survey of a base line running due east from the northeast angle of the township of Purvis, in the District of Nipissing, a distance of twenty-two miles and thirty-eight chains, to the interprovincial boundary, performed in accordance with instructions from your department, dated June 14th, 1907.

After establishing the north-east corner of the said township by planting an iron post, one and seven-eighths inches in diameter, beside the wooden one, and marking thereon "Purvis" on the southwest side, also the lot numbers, I commenced the survey of this base on the 29th of August, and ran east astronomically the above mentioned distance to its intersection with the interprovincial boundary, at a distance of thirty-six chains and eighty-six links north of the ninety-seventh mile post on said boundary.

Wooden posts, six inches in diameter, were planted at the end of every mile, and two bearing trees were marked "B T." The bearing and distance from the posts to the trees were noted.

At the end of the third, ninth, fifteenth, eighteenth, twenty-first miles, and at the intersection with the boundary, iron posts one and one-quarter inches in diameter, and at the end of the sixth and twelfth miles, iron posts one and seven-eighths inches in diameter were planted beside the wooden ones. On both wooden and iron ones were marked in Roman numerals the miles reckoning from the initial point at said north-east angle of Purvis.

The line was run with a six-inch Burts solar compass and checked with three observations for meridian made with a transit at the eastern elongation of Polaris, details of which will be found in the accompanying field notes.

While returning on the base line to the township of Purvis, all the tallies were carefully counted in order to be certain that there was no miscount.

The first three miles is broken with rocky ridges and occasional tracts of boulders and sand. In some of the lower tracts there is good clay land. From the third mile to the end of the twelfth mile it is mostly clay land with a few ridges of boulders and sand.

From the twelfth mile to the boundary there is considerable sand and

gravel and boulders with occasional tracts of clay.

The country generally is rolling. In the sixteenth mile there is an elevation of about one hundred feet. A very small percentage is muskeg.

Probably one-half of the country is fit for agriculture.

No indications of mineral were found.

The timber is black spruce, poplar, jack pine, balsam, white birch and

balm of Gilead, also dry tamarac.

The black spruce, balsam and birch is from six to thirteen inches in diameter, poplar from six to twenty inches, and the jack pine mostly from five to fifteen inches. Some jack pine was found twenty-four inches in diameter in the fourteenth mile. There is very little balm of Gilead. The tamarac is fairly sound and a good size.

The magnetic variation for the first ten miles is about nine degrees and forty-five minutes west. The balance of the line averages about ten degrees

west.

At fifty-three and sixty-two one-hundredths chains, on the east bank of a creek, in the fourth mile, a good pack trail to Lake Abitibi was crossed. It follows southerly along the east bank to about half a mile from the lake. It then crosses the creek and comes out on the west bank at the mouth. The distance along this trail from the base line to the lake is about three miles.

At forty-seven chains in the eighteenth mile, the line runs between two huge granite boulders lying close together on the east bank of a creek. The details are shown in the field notes. This will be a landmark for centuries

to come.

Some delay was caused by the heavy rains. On the 18th of September, I returned to the township of Purvis and after a few days spent in completing that township I commenced my return journey on the 27th of September.

In the sandy portions of the country blueberries are very plentiful.

Accompanying this report will be found field notes, plan and account.

I have the honor to be,

Sir,

Your obedient servant,

(Signed) T. J. PATTEN,

Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 21.)

CERTAIN TOWNSHIP OUTLINES, WEST OF THE MONTREAL RIVER, IN THE TEMAGAMI FOREST RESERVE, DISTRICT OF NIPISSING.

TORONTO, Ontario, December 12th, 1907.

Sir.—I have the honor to submit the following report upon the survey of certain township outlines, west of the Montreal River, in the Temagami Forest Reserve, made by me under instructions from your department dated the twenty-seventh day of May, 1907.

On the 3rd day of June, after having procured a sufficient number of men and supplies, I proceeded from Latchford via the Montreal River to my starting point, being an iron post planted by Ontario Land Surveyor W. J. Blair on the south boundary of the township of Barr at its intersection with the easterly shore of the Montreal River.

From this point I ran a base line due west for a distance of more than twenty-two miles, defining the south boundary of the townships of Barr, Klock, Van Nostrand and Whitson, and being also the north boundary of the townships of Kittson, Dane, Leo and Rorke.

From the six-mile point on this line, which falls within the Mattawapika River, I located by traverse the production of a meridian line due north from this point to the shore on the westerly side of the said river at a distance of one mile sixty-five chains and forty links therefrom and produced the same to the southerly shore of the Montreal River, thus defining the boundary between the townships of Barr and Klock.

From the twelve-mile point I ran a line due north to the southwest corner of the township of Auld, defining the boundary between the townships of Klock and Van Nostrand, and also produced the same due south for a distance of three miles, defining the boundary between the townships of

Dane and Leo for that distance.

From the eighteen-mile point I ran a line due north to the southwest corner of the township of Barber, defining the west boundary of the townships of Van Nostrand and Speight, it also being the east boundary of the townships of Whitson and Banks. I also produced the same due south for a distance of six miles, defining the west boundary of the township of Leo, it also being the east boundary of the township of Rorke. From this point I ran due west six miles, defining the south boundary of the township of Rorke, and thence due north to the southerly shore of Little Macobe Lake, defining the west boundary of the townships of Rorke and Whitson, it also being the east boundary of the townships of McGiffin and Trethewey.

From the northwest angle of the township of Klock, I ran a line due west to Little Macobe Lake, defining the south boundary of the townships of Speight and Banks, and from the twelve-mile point which was determined by triangulation to the north shore of Little Macobe Lake I ran a line due north to the southwest corner of the township of James, thus defining the west boundary of the townships of Banks and Willet, it also being the east

boundary of the townships of Wallis and Roadhouse.

From the northwest angle of the township of Speight I ran a line due west six miles, defining the north boundary of the township of Banks, it being also the south boundary of the township of Willet.

From the southwest angle of the township of James I ran a line due west for five miles, marking for that distance the south boundary of the township

of Mickle or the north boundary of the township of Roadhouse.

From the northwest angle of the township of James I ran a line due west six miles, marking the south boundary of the township of Farr, and thence north six miles more or less to the intersection with the south boundary of the township of Willison, which was produced due west from an iron post at the southwest angle of lot four, concession one, of the said township of Willison, on the east side of the Montreal River.

Good, substantial, squared wooden posts were planted at every mile throughout the survey, excepting where such point came within a lake or river; in such cases a witness post was planted at the shore with the proper chainage inscribed thereon. The mile posts were all properly marked with the mileage, numbered from the east and south from 1 M. to 6 M. for each

township boundary. At the township corners iron posts one and one-quarter inches in diameter were planted in addition to the wooden posts, and both were marked with the names of the several townships on the sides adjacent thereto. Where a township corner came within a lake or river, iron posts were planted on t'e shore and properly marked. These points may be enumerated as follows:—

1. On the east bank of the Mattawapika River on boundary between townships of Barr and Kittson.

2. On the west bank of the Mattawapika River on boundary between the

townships of Klock and Dane.

3. On the west bank of the Mattawapika River on boundary between the townships of Klock and Barr.

4. On the south bank of the Montreal River on boundary between the

townships of Klock and Barr.

5. On the north bank of Willow Island Lake at the southeast angle of the township of Rorke.

· 6. On the east bank of Little Macobe Lake on the boundary between the

townships of Whitson and Banks.

7. On the west bank of the Montreal River at the northeast angle of the township of Farr.

PHYSICAL FEATURES.

In general the surface is broken, rough and rocky, the trend of the hills may be said to be northerly and southerly, though the water divides are very irregular and in many cases the hills break off abruptly. There is a decided exception to this irregularity, however, in what is known as Maple Mountain, which extends northerly and southerly through the centre of the townships of Rorke and Whitson and rises to an altitude of eight hundred or nine hundred feet above Lady Evelyn and Anvil Lakes; its easterly slope is gradual and the western slope is more in the nature of large steps with intervening rolling land or gradual descent. The western base at Gray's Lake and Little Macobe Lake is probably two hundred or two hundred and fifty feet above the eastern base.

Viewing the country from the several heights of land crossed during the course of the survey, the most noticeable features were the numerous small lakes and ponds and the several round and round-topped hills to be seen in every direction.

TIMBER.

The country is timbered with jack or banksian pine, spruce, poplar, and white birch, varying in size from twenty inches down, while the average run is from six to twelve inches in diameter. Some red and white pine is seen scattered throughout, but not in great quantities in any particular part. Other kinds of timber seen, but not in a general way, were cedar, balsam, tamarac (dead), ash and oak. The largest spruce is located along the river valleys: generally described, however, the ridges and high ground are covered with jack pine, poplar and birch, while the lower land is swampy and timbered with spruce.

During the course of the work I met Mr. E. Lalonde a few times (who, I understood, was making an estimate of the timber for your Department,) and gave him what assistance I could in the matter of canoe routes and general descriptions of the country gone over.

WATER POWERS.

The water powers worthy of recognition at the present time or those that might be developed for power transmission, which lie within the country traversed, are as follows:—

1. Mattawapika Falls, in the township of Barr over which all the waters tributary to Lady Evelyn Lake fall into the Montreal River, an estimated

distance of twenty feet.

2. Helen's Falls, eighty feet, Centre Falls thirty-five feet, and Frank's Falls thirty feet, on the Lady Evelyn River and all within a distance of one and one-quarter miles are adapted for development to an extensive capacity. The fall is almost perpendicular in each case.

3. Indian Chute and Rapids, on the Montreal River, at the north boundary of the township of Barr, with an estimated fall of eighteen feet and

five feet, respectively, is an ideal site for a power plant.

In addition to those above mentioned there are several rapids and falls from five to fifteen feet along the north and south branch of Bear Creek, Lady Evelyn River and Gray's River, which might be suitable for local mining or milling purposes.

ROCK FORMATION.

As this part of the Reserve has been given considerable attention and research by the Bureau of Mines within recent years the reports from that source on the Geological features will be much more conclusive and in detail, than any report I could make from such observations as it was possible for me to make.

Quartzite and quartzose schists of the Huronian formation extends

throughout the south-western portion of the country surveyed.

Greywacke and slate were most prominent in the township of Barr and the

the south-eastern part of Township of Klock.

Diabase gabbro and conglomerate were most noticeable along the west side of the Mattawapika River and in the townships of Willet, Mickle and Farr.

GAME.

Moose are plentiful, and signs of bear were frequently seen throughout the country. In two cases fresh beaver works were found, while mink were frequently seen by some of the party. The scarcity of partridge and duck was very noticeable as compared with former seasons.

Pike, pickerel, bass and trout were caught for camp use in some of

the lakes, while in other waters it was impossible to secure any.

GENERAL CONDITIONS.

The season was late in opening, some of the lakes were not free from ice until the 1st of June, and the water was very high in the rivers and swamps during that month. The axemen and chainmen of the party were frequently wading in two or three feet of water while opening out and chaining the line across flooded land.

Rain storms and a cloudy atmosphere were prevalent during the months of July, August and September, and it was impracticable to secure as many

observations for determining meridian as was desirable.

A great number of prospectors were met on the Reserve during the month of June, but a decided migration took place as the mosquito made his appearance.

The portages along the canoe routes are not in good condition, and those which I had occasion to use for portaging supplies over were improved to some extent.

Travelling by canoe being the only means of conveyance in the interior of the Reserve, the idea suggests itself that to improve the portages on several of the main canoe routes and clean up good camp grounds would be a beneficial outlay of money to the tourist, the prospector, and the ranger, and thus indirectly to the Crown.

Accompanying this report, I submit plan, field notes, affidavits and accounts.

I have the honor to be, Sir,

Your obedient servant,

(Sgd.) L. V. Rorke, Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests, and Mines, Toronto, Ont.

(Appendix No. 22.)

LARDER LAKE, AND THE WEST AND NORTH BOUNDARIES OF THE TOWNSHIP OF HEARST, IN THE DISTRICT OF NIPISSING.

WINDSOR, Ontario May 30th, 1907.

Sir,—In compliance with instructions received from your department, dated March 28th, 1907, I have made a survey of Larder Lake, and the west and north boundaries of the township of Hearst, in the district of Nipissing.

I left Windsor on the morning of March 30th via Canadian Pacific Railway, and arrived at New Liskeard on the morning of March 31st, where I completed my supplies, and engaged what men I needed to complete my party. I left New Liskeard on the evening of April 3rd, going by Temiscaming and Northern Ontario Railway as far as Heaslip, thence by sleigh to Tomstown, thence to Larder Lake via Wilson's Trail, arriving at the lake at noon of Friday, April 5th, and having made camp at the narrows, I commenced the survey of the lake immediately.

The ice was good when I arrived, and continued perfectly safe until I completed the survey, although slush formed from four to eight inches deep, some of the warmer afternoons. Having completed the survey of the lake, I moved out to the continuation of Smith's tie line three miles north of the north-east angle of the township Catharine. From here I rechained and blazed the two miles of Smith's tie line and continued the same line north four miles farther, to the north-west angle of the township of Hearst, thence I ran due east five and one-half miles (5½) to where the said line intersects the west shore of Larder Lake proper, having cut off or ran across two bays as shown on the accompanying plan, I completed the whole of this work on the evening of Wednesday, April 24th, and having packed my goods and disposed of my excess supplies, I started for home, Thursday morning,

arriving in Tomstown the same night, thence to New Liskeard on Friday morning's train, and having settled with the men, I left on Friday evening's

train arriving in Windsor on Saturday at three o'clock p.m.

In making this survey, I noted all the survey posts or lines I saw, and marked and numbered fourteen (14) trees or posts on prominent points around Having found and located so many survey and mining location posts, I did not deem it necessary to mark, and locate a very great number of other trees and posts.

I also located the position of all the islands in the lake, and marked one or more trees on each with a designating letter. I did not traverse the shore line of these islands and hence the shapes and areas given on the plan are only approximate, being as near the shape and size as my chainmen could estimate in walking around and locating them. The position of these islands as you will notice on the plan are all located from some point on the traverse line, the kind, and approximate size of trees marked, are all

given on the plan and field notes.

In running the west boundary of the township of Hearst, I measured the line and set the posts one mile apart, marking them on the south side with the number of miles each is from the north-east angle of Catharine I planted a one and a quarter inch iron post three (3) feet long, painted at the bottom, forged at the top, painted red, and marked "III.M." on the south side at three (3) miles north of the north-east angle of the township of Catharine. I planted a one and seven-eighth inch iron post three (3) feet long, pointed at the bottom, forged at the top, painted red, and marked "Gauthier" on the northwest side, "McElroy" on the southvest side, "Hearst" on the south-east side, "McVittie" on the north-east side, and "VI.M." on the south side, at the northwest angle of the township of Hearst, alongside of a six (6) inch spruce post similarly marked. At, where the north boundary of the township of Hearst intersects the west shore of the first bay of Larder Lake, I planted a one and one-quarter inch iron post three (3) feet long, pointed at the bottom, forged at the top, painted red, and marked "II.M. 59c." on west side alongside of a five (5) inch cedar post similarly marked. At, where the north boundary of the township of Hearst intersects the second bay of Larder Lake, I planted a six (6) inch spruce post marked "III.M. 79c." on the west side. At, where the north boundary of the township of Hearst intersects the west shore of Larder Lake proper, I planted a five inch jack pine post marked "V. M. 39c 80l." on the west side.

The surface of this section of the country is quite uneven, particularly

is this so in the neighborhood of Larder Lake.

The timber is quite small, consisting chiefly of poplar, balsam, spruce,

birch, jack pine, and alder, being of little value except as firewood.

The principal part of all the country worked over, has been staked out in mining locations, but only a very small percentage of the claims staked have been as yet surveyed.

Accompanying this report, you will find plans, field notes, accounts, etc.,

all of which I hope will prove satisfactory to the department.

All of which is respectfully submitted.

I have the honor to be.

Sir,

Your obedient servant,

(Sgd.) J. J. NEWMAN, Ontario Land Surveyor.

The Honorable, The Minister of Lands, Forests and Mines.

Toronto.

(Appendix No. 23.)

Base and Meridian Lines in the Vicinity of Larder Lake in the District of Nipissing.

WINDSOR, Ontario, December 7th, 1907.

Sur,—In compliance with instructions received from your department, dated June 11th, 1907, I have completed the survey of the Base and Meridian Lines in the vicinity of Larder Lake, in the district of Nipissing.

I left Windsor by the Canadian Pacific Railway on the morning of June 20th, and arrived at New Liskeard on the morning of June 21st, where I had made arrangements for my supplies and some men, and was thus able to complete arrangements during the day, and left for Englehart that evening, and was thus able to arrive at Boston on the evening of the 22nd. At Boston, I secured a few pairs of blankets and shoe packs, etc., for some of my men, and packed into the north-west corner of the township of Boston on Monday, June 24th, where I commenced the survey on Tuesday.

I commenced my survey at a one and seven-eighth inch iron post set beside a six inch spruce post in a cairn of stones. both marked on the northeast "Lebel," on the south "Con. VI.," on the south-west "Otto," on the south-east "Boston." There I ran the second base line east to its intersection with the good larger line.

section with the second meridian.

I then returned to the northwest corner of Boston and ran the first meridian due north six miles, numbering the posts on the south side with the number of miles each was from the northwest corner of Boston. From the sixth mile post on the first meridian I ran the third base line due east until it intersected the third meridian, numbering the posts on the west side as shown on the accompanying map.

I then returned to the sixth mile post on the first meridian and continued it due north twelve miles 5.57 chains to the southerly boundary of the township of Barnet, which I intersected 24.88 chains west of the south-

east corner of the said township.

I then moved north to the northeast corner of the township of Barnet, which is also the southeast corner of the township of Michaud, where I found a one and seven-eighth inch iron post set beside a seven inch spruce post marked on the northwest side "Michaud," on the southwest "Barnet," on the south "Con. VI.," on the north "XVIII. M. +3.70c," on the west "Lot I, XII. M. +6.83c." From the last mentioned corner I ran the fourth base line due east to the line between the Provinces of Ontario and Quebec, intersecting the third base line at 11 M.+61.16 chains from the northeast corner of Barnet, and the interprovincial boundary 27.53 chains north of the 61st mile post on the said boundary.

Again I commenced the second meridian line at the one and seveneighth iron post, set beside a three inch spruce post marked on the south side "VI. M.," on the southeast side "Catharine," on the southwest "Pacaud," on the northwest "Boston," and a six inch cedar post marked on the south side "Con. VI.," on the west side "Lot I.," planted on the northwest corner of the township of Catharine, which is also the northeast corner of the township of Pacaud and running due north to the 3rd base line, intersecting the 2nd base line at 5 M. +78.54 chains and the south shore of Victoria Lake at 5 M. + 14.57 chains from the 2nd base line.

After completing the 2nd meridian I returned to the 2nd base line which I continued east to the line between the townships of McElroy and Hearst which intersected the last mentioned line at 2.83 chains south of the

northwest corner of Hearst. From the last mentioned point, I commenced my 3rd meridian, running it due north thirty miles, intersecting the 3rd base line at 6 M. + 6.07 chains from the northeast corner of the township of McElroy, and the 4th base line at 18 M. + 8.54 chains north of the 3rd base line. I then returned to the 3rd base line which I continued east to the interprovincial boundary which I intersected at 12.875 chains north of the 43rd mile post on said boundary. From the 6th mile post on the last mentioned line I ran the 4th meridian due south to the 1st base line, crossing Larder Lake as shown in the field notes. I commenced the 1st base line at a one and seven-eighth inch iron post set beside a six inch jack pine post in a cairn of stones, both marked "Catharine" on southwest, "Me-Elroy" on northwest, "Hearst" on northeast, and "Skead" on southeast. From these posts I ran due east crossing Ontario Land Surveyor Byrne's line between the townships of Skead and Rattray at 6 M. +1.75 chains, and my 4th meridian at 6 M. +2.67 chains, and intersecting the interprovincial boundary at 13.90 chains north of the 31st mile post. Again I commenced the 2nd base line at a five inch jack pine post marked "V.M.—XXXIXC." "LXXX." on west side and ran due east to the interprovincial boundary, which I intersected at 18.08 chains north of the 37th mile post.

Iron posts were planted and marked as follows:—

- 1. At north-west corner of Lebel marked on south side "VI.M," southeast side "Lebel."
 - 2. At lake, 6 miles north of Lebel, marked on south side "V.M.+79.00c."
 - 3. At south boundary of Barnet marked on south side "XII.M.+5.57c."
- 4. At intersection of 2nd meridian and 2nd base line marked on south side "VI.M.—I.46c," northwest side "Lebel," southwest side "Boston," southeast side "McElroy."

5. At south side of Victoria Lake marked on southeast side "Gauthier,"

south side "V.M+14.30c," southwest side "Lebel."

- 6. Where the 2nd base line intersects the line between the townships of Hearst and McElroy marked on the northwest side "Gauthier," on the southwest side "McElroy," on the west side "V.M.+LXXVI., VII."
- 7. Where the 3rd meridian crosses the 3rd base line marked on the southwest side "Gauthier," on the southeast side "McVittie," on the west side, "VI.M.+1c."
- 8. On 3rd meridian, 6 miles north of 3rd base line, marked south side "VI.M."
- 9. On 3rd meridian, 12 miles north of 3rd base line, marked on the south side "XII.M."
- 10. At intersection of 3rd meridian with 4th base line marked on south side "XVIII.M.—8.54c," on west side "XI+61.16c."
- 11. On the north-end of the 3rd meridian, marked on south side "XXIV. M.+8.54c.
- 12. Where the 4th meridian intersects the 1st base line marked on northeast "McFadden," on north-west "Hearst," on west, "VI M.+2.67c."
- 13. On north shore island C C marked on south "IV.M+9c," marked on south-west "Hearst," on south-east "McFadden."
- 14. Where 4th meridian intersects north shore of Larder Lake marked '36c, 60l, on south side, marked "McGarry" N.E. corner, marked "McVittie' N.W. corner.
- 15. Where the 4th meridian line intersects the 3rd base line marked "VI.M." on W. side, marked "McVittie" on S.W. side, marked "McGarry" on S.E. side marked "VI.M." on S. side.

16. Where the 1st base line intersects the boundary line between Ontario and Quebec, marked "Rattray" on S.W. side, marked "McFadden" on N.W. side, marked "V.M.+20 chs. 10 Links" on W. side.

17. Where the 2nd base line intersects the line between Ontario and Quebec, marked "McFadden" on S.W., marked "McGarry" on N.W., marked "V.M.+

17c 8 links" on W. side.

18. Where the 3rd base line intersets the west shore of Victoria Lake, marked "V.M.+35.40c" on W. side, marked "Lebel" on S.W. side.

19. Where the 3rd base line intersects the boundary between Ontario and

Quebec, marked on S.W. "McGarry," marked on W "V.M +14c."

20. On 4th base line six miles east of Barnet, marked on west side "VI. M."

21. On 4th base line six miles east of 3rd meridian, marked on west side VI. M."

22. Where the 4th base line intersects the line between Ontario and Quebec, marked on west side "XI., M.+4.40c."

'All these posts were three feet long, one and one-quarter inches in

diameter, forged at the top, pointed at the bottom and painted red.

Wooden posts were planted at every mile and marked with the number of miles, each is from the initial point, on the south side of the post, on all meridian lines, and on the west side of the post on all base lines. At all township corners the names of the townships were marked on the side of the post which faces the respective townships.

The magnetic variation is fairly uniform at about 9 degrees 30 minutes

to 10 degrees w.

All lines were well cut out and blazed.

The distances of all lines from the various closing points are noted in the field notes.

Owing to the extremely wet and cloudy weather, I was unable to observe

for Azimuth as often as I wished.

With the exception of Larder Lake, Beaver House Lake and Victoria Lake, all the lakes crossed by the lines were small and of little importance. The White River, Izzabamageezy River and Black River were the only large streams crossed.

The country on the whole is quite rocky, rough and hilly, particularly south of the height of land around Larder Lake and along the White River and Beaver House Lake. The land in the vicinity of the fourth base line is much leveller, better timbered and more valuable from an agricultural

standpoint.

Nearly the whole country south of the height of land has been prospected over, a great deal has been staked out as mining claims, and a small portion of the claims have been surveyed. All surveyed lines and claim lines that were noticed were tied on to my lines wherever crossed, and the distances to some post measured, as shewn in the field notes accompanying this report.

There appears to be more or less mineral in nearly all the outcropping rock, but I did not notice any mineral veins which were not already staked

out and located.

The timber consists chiefly of poplar, spruce, white birch and balsam from 6 inches to 20 inches in diameter, with banksian pine and a few white pine on the higher sandy or gravelly soil. The tamarac is all dead.

Fire has been through the country around the 1st meridian about thirty years ago, I was informed by the Indians, and hence the timber along the western part of the district covered by this survey is mostly second growth and of little value.

Of large game, moose and bear are quite plentiful, and several were seen by members of the party; partridge, duck, beaver, rabbits and muskrats are numerous, trout and pike were caught in the lakes and streams. Blue berries were exceptionally plentiful on the higher lands, and raspberries and cranberries, red currants and sugar plums are well distributed over the whole area.

All of which is respectfully submitted,

I have the honor to be,
Sir,
Your obedient servant,
(Sgd.) J. J. NEWMAN,

Ontario Land Surveyor.

The Honorable.

The Minister of Lands, Forests and Mines, Toronto, Ont.

(Appendix No. 24.)

GRAND TRUNK PACIFIC BLOCKS 8, 9 AND 10, DISTRICT OF RAINY RIVER.

BRUCE MINES, ONTARIO, December 14th, 1907.

Sir.—I beg to state that in accordance with your instructions dated May 30th, 1907, I have completed the survey of the outlines of Blocks 8. 9 and 10 in the District of Rainy River, these blocks forming part of the Grand Trunk Pacific Railway Company's land grant under Chapter 18, 4 Edward VII., and I have the honor to submit the following report.

I started for Dinorwic on June 19th and proceeded as quickly as possible, by way of Minnietakie Lake, to Block 10, which was surveyed first. As soon as the outlines of this block were completed, I moved my outfit up English River, and through Flying Loon Lake to the southwest corner of Block 9. On the completion of this block, I moved to Lake of Bays, and up a river flowing into the west side of this lake to a spot near the starting point for Block 8. I completed the survey of Block 8 on October 19th and arrived home a week later.

In performing the survey, all the lines were run astronomically north and south and east and west. Frequent observations were taken to confirm or correct the bearing of the lines. The details of these observations are noted in the field notes. All the lines were carefully cut out and blazed.

Iron posts were planted at the corners of the blocks with the exception of the northeast corner of Block 10 and the southeast corner of Block 9. These corners happened to fall in the water, and the iron posts were planted on the lines at the shore. The details of the planting of these posts are given in the field notes. Wooden posts of the best timber available, were planted every mile on all the lines run.

The posts on the east and west boundaries of the blocks are all marked on the south side with the number of miles the post is distant from the

southeast or southwest corner, as the case may be.

On the north and south boundaries, the posts are marked on the east side with the number of miles the post is distant from the northeast or southeast corner of the block. In cases where the end of a mile came in a lake, a post was planted on the nearest shore and the chainage to the last mile post was marked on it with a scribing iron. In most cases, two bearing

trees were marked at each post, and the distance and bearing of each tree from the post recorded in the field notes. Wherever possible a mound of stones was piled around the post. These are also recorded in the notes. Throughout the survey, nothing but cedar and tamarac was used in making the posts.

BLOCK 8.

The survey of Block 8 was commenced at the 17th mile post marked "XVII. M." on the base line run by Ontario Land Surveyor Alexander Niven in 1897. This base line commences at the 120th mile post on the boundary between the districts of Thunder Bay and Rainy River and runs due west astronomically from that point.

From the 17th mile post on this base line, I ran a line north astronomically a distance of two miles. I then returned to my starting point and ran south astronomically a distance of sixteen miles, thence east astronomically a distance of six miles, thence north astronomically a distance of eighteen miles, thence west astronomically a distance of five miles seventy-nine chains, thirty-five links, intersecting the line first run at a point two miles three links north of the starting point.

An iron post, one and seven-eighths inches in diameter, was planted alongside of a wooden post at each of the four corners of the block. Each post was marked "G.T.R. Block eight" on the side facing the block.

Block 8 contains a number of lakes, of which Lake of Bays in the northern part of the block is the largest. This lake is about fifteen miles long, and lies almost wholly within the block with the exception of a long bay, which extends for about five miles southwest of where it is crossed by the west boundary of the block. The shoresof this lake are mostly rocky, the prevailing formation being Laurentian. The outlet of Lake of Bays is a rough rapid stream, running in a northerly direction towards Sturgeon River. It leaves the lake about a half a mile north of the northeast corner In the southern portion of the block occur Pine Lake, Whiterock Lake and Young Lake. These lakes are each from two to three miles across, and are tributary to English River. The shores of these lakes are mostly low lying, the rocks being drift covered to a large extent. exposed, however, they appear to be of Huronian formation, hornblende and other green schists predominating. The east boundary is crossed in the ninth mile by Penassie Lake, a large narrow lake which extends about four miles east of the east boundary of Block 8. The formation surrounding this lake is granite. One large outcrop of trap occurs at a high point a few chains west of the line on the south side of the lake.

The contact between the Huronian and Laurentian formations occurs on a high ridge between two smaller lakes at five miles, thirty-two chains from the southeast corner. A great deal of Block 8 is covered with glacial drift, composed of sand and gravel mixed with large boulders. The rock exposures are frequent, and the ridges are mostly less than sixty feet in height. East of Lake of Bays, however, are a number of high hills running from two hundred feet to two hundred and fifty feet in height. Considerable areas of muskeg are met with, the largest being in the southwestern portion of the block.

Of agricultural land, there is little worth mentioning.

Block 8 is well timbered throughout, having been damaged but little by fire. The best timber now standing is north of Lake of Bays, where there is a heavy growth of jack pine suitable for tie timber. Most of the north

boundary runs through timber of this class, with some very good tamarac in the low places. This class of timber appears to extend for a considerable distance north of Block 8. On the west boundary the timber is a rather poor average, being composed of jack pine, spruce, white birch and poplar on the higher lands, with spruce, tamarac and balsam in the muskegs. average size of all this timber is small, but there is a considerable quantity of large timber throughout. Southwest of Pine Lake a fine block of red pine has recently been cut. The stumps show that nearly all of this timber was inside of Block 8. The timber along the rest of the south boundary is similar to that already described, except that south of Young Lake, there are some scattered white pine trees, all of which appear to be inside of Block A large number of these trees, however, are unsound. North of Young Lake there is an area of brule, about twenty-five years old, which extends back for about half a mile from the lake, and appears to run northeast towards Sturgeon Lake. A large portion of the block east of Lake of Bays has been burnt over. One fire ran through about ten or twelve years ago, and a smaller one occurred about two years ago. Outside of these areas of brulé, the timber along the east limit of the block appears to be about the same as on the west boundary, and I am convinced that the same description applies to practically the whole of the block. There are no water powers of any magnitude, as there are no large rivers inside Block 8. On the streams connecting Penassie Lake with Lake of Bays there is a rough rapid having a fall of about twenty feet in less than a quarter of a mile. On Grassy River, there is a fall of about fifteen feet in about six chains a short distance below Pine Lake. In neither instance, however, is the volume of water large enough to maintain a power of any great magnitude. No economic minerals were met with, although, as before stated, considerable areas of promising rocks occur, especially the Huronian series, in the southern part of the block.

The Thunder Bay Branch of the Grand Trunk Pacific Railway crosses the block near the southwest corner. The line crosses the Grassy River at the rapids referred to above.

BLOCK 9.

The survey of Block 9 was commenced at the eighteenth mile post (merked XVIII. M.) on the first meridian run by Ontario Land Surveyor Alexander Niven in 1897, west of the boundary between the districts of Thunder Bay and Rainy River, this point being the southwest corner of From this point a line was run due east astronomically a distance of six miles, thence north astronomically a distance of eighteen miles, nineteen chains, ten links, to Ontario Land Surveyor Niven's base line run in 1897. The base line was intersected at a point eleven chains thirty links east of the twenty-third mile post (marked XXIII. M."). The north and west boundaries of Block 9 were run as base and meridian lines by Ontario Land Surveyor Niven in 1897. An iron post one and three-quarter inches in diameter was planted by Ontario Land Surveyor Niven at the eighteenth mile on the meridian above referred to. This post was marked "XVIII. M." on the south side by Mr. Niven. I marked this post "G.T.R., Block Nine" on the northeast side. The end of the sixth mile on the south boundary being the southeast corner of Block 9 came in the water of Otter Lake. The point where the east boundary of Block 9 intersected the shore of Otter Lake was located by means of a triangulation, the details of which are shown in the field notes. At a point above high water near the eastern extremity of

the south boundary of Block 9, a cedar post was planted alongside an iron post, one and seven-eight inches diameter. The cedar post was marked "I.M.—6.92 chains" on the east side, and the iron post was marked "G.T.R., Block nine" on the north side. Similarly, a cedar post was planted beside an iron post, one and seven-eighth inches in diameter, at a point on the east boundary of the block a little above high water mark. The cedar post is marked "I.M.—40.68 chains" on the south side, and the iron post is marked "G.T.R., Block nine" on the west side. At the northeast corner of Block 9 an iron post one and seven-eighth inches in diameter is planted beside a large tamarac post. The iron post is marked "G.T.R., Block nine" on the southwest side.

A number of small lakes occur in Block 9 and the English River flows in a northwesterly direction across the southern portion of the block. English River consists mostly of a series of lake expansions, of which Otter Lake and Jarvis Lake are the largest. Between Otter and Jarvis Lakes, there is a fall of about seven feet. A dam has been built at this point, and the water backed up into Otter Lake about three or four feet above the normal level. The raising of the water in Otter Lake and tributary lakes and streams has greatly facilitated the moving of supplies from the main line of the Canadian Pacific Railway to the Grand Trunk Pacific Railway now under construction. Since the building of this dam, it is possible to run a gasoline launch, towing a fair sized scow, right up to the falls on Grassy River, whereas, previously it was with difficulty that a canoe could be taken up during a dry season. A very good water power could be developed at Below Jarvis Lake on English River, there are four other falls and rapids where water powers of considerable importance could be developed within Black 9. As there is a large amount of pulpwood tributary to these waters, these water powers may be of great importance in the future.

The greater portion of Block 9 is covered with glacial drift, consisting of sand and gravel with large boulders. There are also considerable areas

of muskeg scattered throughout.

The rock ridges are not usually more than forty or fifty feet high. The highest hills being sand and gravel ridges south of Jarvis Lake. The exact location of the geological contacts are hard to determine, owing to the amount of glacial drift, but an area of Laurentian rocks consisting of granite and gneiss crosses the southern three miles of this block and extends south beyond the main line of the Canadian Pacific Railway. North of this, Block 9 is crossed by a belt of hornblende and other green schists of the Huronian age, striking generally east and west. The Laurentian rocks occur again towards the northern portion of the block along the east boundary, but it is impossible to say from the information at hand where the contact occurs. No traces of economic minerals were met with in running any of the lines.

Of agricultural land, there is practically none.

The south boundary crosses a belt of very good red pine between the third and fourth mile posts. The greater portion of this pine appears to be south of Block 9, but a considerable quantity occurs inside the block. The timber along the rest of the south boundary is balsam, spruce and tamarac on the low ground, and jack pine, spruce, poplar and white birch on the higher areas. The timber is small for the most part, but larger trees occur scattered throughout and occasionally occur in belts of fairly large size. Along the east boundary there is very little good timber. Between Jarvis and Otter Lakes, there is a large area of old brulè, with very little timber of any value. West of English River, however, the fire has appar-

ently not reached and the timber is of better quality. North of Jarvis Lake for about six miles, the line runs through a fairly good growth of timber similar to that already described along the south boundary. No pine, however, was noticed except jack pine. One or two burnt areas occur, the fires having apparently started at the right of way of the Grand Trunk Pacific Railway. The northern six miles of the east boundary were practically all burnt over during the past season and whatever valuable timber there was has been destroyed. A few green belts remain, but they consist of low swampy areas, which have been run around by the fire. This burnt area extends east of Block 9 as far as could be seen from the line, but no sign of fire was noticed on the west boundary of Block 8, which is about six miles east of the line above referred to. This fire also appears to have originated at the right of way of the Grand Trunk Pacific Railway and has burnt over a very large extent of country.

The Grand Trunk Pacific Railway crosses the block about the middle of the block. The general direction of the railway being northwest and

southeast.

Block 10.

The survey of Block 10, was commenced at the thirty-fifth mile post on the base line run by Ontario Land Surveyor Alexander Niven in 1897. From this point, a line was run due north astronomically a distance of eight miles, the north-east corner of Block 10, being at the end of the eighth mile. This corner came in Deception Lake. The point where the north limit of Block 10 intersected the shore of Deception Lake was determined by a triangulation, the details of which are shown in the field notes. north-east corner, the north boundary of Block 10 was run due west astronomically, a distance of seventeen miles, fifty three chains, sixty five links, to where it intersected the east boundary of Indian Reserve number twentyeight. The Indian Reserve boundary was opened out and re-blazed as far as the shore of Lost Lake, where the original corner post of the Reserve was discovered. This line was then produced across a bay of Lost Lake and across the point of the Indian Reserve which extends a considerable distance east of this line. This line was not re-blazed in crossing the point of the reserve. I obtained an observation on Polaris on this point, and found the bearing of the line to be south 1 degree .07 minutes west astronomically. I corrected this at the south side of the point on the Reserve by off-setting a distance of 2 chains, 56.6 links to the east, which gave me a point due south astronomically from the original corner post of Indian Reserve number twenty-eight above referred to. The details of the observations and calcufation involved in making this correction are shown in their proper place in the field notes.

I then ran due south astronomically, until I had reached a point six miles, six chains, fifty-four links south of the northwest corner of Block 10. The south boundary of the Block was then run due east astronomically to where it intersected the line first run at a point, one mile seventy-two chains pinety-one links north from the thirty-fifth mile post on Ontario Land Surveyor Niven's Base Line, the said point being the south-east corner of Block 10. The east boundary of Block 10, is therefore, six miles, 7.09 chains in length, and the west boundary is six miles, 6.54 chains in length.

An iron post, one and seven-eighth inches in diameter was planted at the southeast corner of Block 10, and marked "G.T.R. Block 10" on the northwest face. The northeast corner of Block 10 came in Deception Lake, as before stated, but an iron post one and seven-eighth inches in diameter

was planted alongside a wooden post at a point in the east boundary of Block 10, a little above high water mark of Deception Lake. This iron post was marked "G.T.R. Block 10" on the west side. At the northwest and southwest corners of the Block similar iron posts were planted and are marked "G.T.R. Block 10" on the side facing the Block.

Block 10 is well watered by a number of large lakes and rivers. Sturgeon River crosses the east boundary about a mile and a half north of the southeast corner and flows in a southwesterly direction to Abram's Lake. Sturgeon River is a large stream of fairly clear water, flowing with a sluggish current, and is navigable for small steamers throughout the limits of the survey and for a considerable distance east.

English River flows through the block in a general north and south direction. It is a large stream of fairly clear water, and is extremely irrevermilion River is entirely within the block, from where gular in outline. it leaves Big Vermilion Lake in the south-western portion of the block to where it empties into Pelican Lake. It is a beautiful stream of clear water about a chain in width, and flows with a moderate current. The largest lakes are Lost Lake, Pelican Lake, and Abram's Lake. These are really expansions of the English River, and are extremely irregular in shape, and are large in extent. Abram's Lake is nearly all outside the block, a portion of the northeast bay being the only part which crosses the south In addition to these, are a number of smaller lakes, all tributary to English River or its lake expansions. There are two water powers of importance, Pelican Falls at the outlet of Pelican Lake is the larger, and a splendid power can be developed here. The total fall is about fifteen feet and consists of two cascades a short distance apart, of which the lower one is the higher. The distance across the portage around the two cascades is about a quarter of a mile. A very large volume of water passes here and as the present intention appears to be to locate the junction of the Thunder Bay Branch of the Grand Trunk Pacific Railway with the main line of the National Transcontinental Railway very near here, the water power which can be developed will be of very good value in the future, as there is an immense amount of pulpwood which can be easily driven to this There is also a smaller power on Vermilion River about a half a mile below the point where the river leaves Big Vermilion Lake. consists of an almost perpendicular drop of about twelve feet. The volume of water is not nearly so large as in the case of Pelican Falls, but a power can be developed which will undoubtedly be of some importance in the future.

The general characteristics of block 10 as regards land and timber, are very similar to blocks 8 and 9. There is no agricultural land worth mentioning. The country is largely drift covered sand and gravel with stony land being very much in evidence.

There are also considerable areas of muskeg. The rock exposures are frequent, the ridges being usually not more than sixty feet in height. The prevailing formation is granite and gneiss, although there is a considerable area of Huronian rocks consisting of traps and schists along the Vermilion and Sturgeon Rivers and extending south for some distance. A number of mining locations have been surveyed in this belt, principally along the Vermilion River. No economic minerals were met with, however, in running any of the lines. There is considerable local magnetic variation along the west boundary of block 10 south of Lost Lake and also on the east boundary between Sturgeon River and Botsford Lake. Elsewhere the magnetic variation remains fairly constant at about 5 degrees 30 minutes east.

The timber is similar as a whole to blocks 8 and 9, being composed of spruce, balsam and tamarac in the lower lands, and jack pine, spruce, poplar, and white birch in the higher lands. Along the north boundary there is a large quantity of very good spruce, tamarac and jack pine, and a large amount of very good tie timber can be obtained in the portion of block 10 lying northeast of Pelican Lake and adjacent to the north boun-This belt of timber appears to extend for a considerable distance north of this block. There is also some very good timber of the same class south of Pelican and Lost Lakes. Some small areas of red pine exist along the shores of Pelican and Lost Lakes, and also on English River, but none of any extent were encountered on the lines. Along the Sturgeon River, there is a large area of brulè with no timber of value. This area extends for a considerable distance back from the river. South of Sturgeon River a fire of considerable extent raged during the early part of the past season and in fact was still burning in places when the survey was commenced. The timber destroyed, however, in this locality was of small value as most of this section had been burned over some years ago. A small area of brulè exists also along the north shore of Big Vermilion Lake.

The Thunder Bay Branch of the Grand Trunk Pacific Railway, and the main line of the National Transcontinental Railway both cross block 10, and it is expected that the junction of these two will be in the neighborhood of Pelican Falls.

Throughout the season the magnetic variation remained fairly constant at from 5 degrees to 5 degrees, 30 minutes east, with the exception of a few places on Block 10 where the local attraction was very noticeable. Whenever any such local attraction was met with, it was noted in the proper place in the field notes.

All the lakes encountered during the season abound in fish. Splendid trout and whitefish are to be obtained in large quantities in all the large lakes, and pike and pickerel may be caught anywhere. Moose appear to be very plentiful and the Indians report fur bearing animals still numerous although not so plentiful as in former years.

Accompanying this report, are a mounted plan, and tracing of each

block, a certified copy of the field notes, and accounts in triplicate.

I have the honor to be,
Sir,
Your obedient servant,
(Sgd.) JAMES S. DOBIE,
Ontario Land Surveyor.

The Honorable,
The Minister of Lands, Forests and Mines.
Toronto.

(Appendix No. 25.)

GRAND TRUNK PACIFIC BLOCKS, Nos. 1, 2, 3, 4, DISTRICT OF THUNDER BAY.

NIAGARA FALLS, ONT., December 27th, 1907.

STR,—I have the honor in accordance with my instructions dated the 25th day of May, 1907, to survey the outlines of four blocks of land along the Thunder Bay Branch of the Grand Trunk Pacific Railway to submit the following report.

The final instructions for my guidance reached me on the third day of June and I started the same evening for Fort William, where I arrived two days later and spent the next few days in securing and forwarding supplies and necessary camp equipment and selecting men to take charge of the transport. On Saturday the 8th, I proceeded with a full party to Osko, a station on the Canadian Pacific Railway in Block No. 1, about a mile and a half from the north boundary of the block. Here I found a small storehouse where I left part of my supplies and started in search of a post planted by Mr. E. Stewart, Ontario Land Surveyor, in 1895, to mark the township outline which was taken as the north outline of this block.

Having taken observations for Latitude and Azimuth, I proceeded to reopen the line run west by Mr. Stewart twelve years ago, a mile and a' half to the west boundary of the township and re-establish the post planted by him and there planted the iron post marking the northwest corner of Block No. 1, and the southeast corner of Block No. 2. Returning to the railway I produced the line east ten and a half miles to the proposed easterly limit of the block; then returning to the northwest corner I ran the west boundary south six miles and then proceeded to the intersection of the south boundary with the Canadian Pacific Railway, finding Mr. Stewart's post about a quarter of a mile southeast of Buda Tunnel, marking the outline taken as the south boundary of the block.

From the Canadian Pacific Railway I first re-opened Ontario Land Surveyor Stewart's line two and a half miles to his iron post at the south-east corner of the township renewing the posts and marking them as perinstructions. I then ran west to the southwest corner of the block and returning east six miles to Stewart's iron bar, I produced the line east six miles further to the proposed southeast corner of the block, where I turned and ran north eight-five chains, coming suddenly on the Dog River, which I was instructed not to cross but to fall back on my south boundary far enough so that in running north the boundary would not come in contact with the Dog River or Lake. I set the iron post marking the southeast corner of Block No. 1, forty chains farther west and ran the east boundary of the block north to its intersection with the north boundary and marked the northeast corner with an iron bar as per instructions.

The surface of the ground may be classed as undulating to hilly, becoming rougher towards the east end of the block. The soil throughout is sandy loam, sand or gravel. Some spots are covered with large eratic boulders of glacial deposit. The rock, where outcrops occur, is granite of the Laurentian formation. The block as we recede from the railway becomes heavily timbered, the timber increasing in size and value towards the east end of the block where there are scattered pines from twenty to twenty-eight inches in diameter, also some large poplar, birch, spruce and tamarac. In the vicinity of the railway, the timber has been to a great extent fire killed, some parts of recent date and others where ten or twelve years have expired since injurious fires passed over.

There are no lakes within sight of the outlines in the block that are worthy of mention, and the only stream of any size is the Osko River, which enters the block from the west crossing the west boundary in the fifth mile and leaving the block near the west end of the eleventh mile on the south

Work in this block was finished the 10th of July and a move made by train from Buda to Dexter on the day following, the weather from beginning of June having been all that one could desire. On the 13th of July the weather took on a great change, heavy showers accompanying electric

storms became of daily occurrence and from that time until the middle of October there were few days on which it did not rain sometime during the twenty-four hours. At intervals heavy rain fell for two or three days in succession and watercourses, creeks, rivulets and muskegs were filled to overflowing. These conditions caused considerable delay in the prosecution of the work.

In surveying Block No. 2, I began at the southeast corner and ran the east boundary astronomically north six miles to a post and iron bar planted by Ontario Land Surveyor Stewart, in 1895, to mark the northeast corner of a township which was adopted as the northeast corner of this block. Here I planted the iron post marked as per instructions and turning west reopened Mr. Stewart's line to the Canadian Pacific Railway renewing the posts and marking the mileage thereon. Where the line crossed the Canadian Pacific Railway much work had been done during recent years on both sides of the track and no trace of the posts planted by Mr. Stewart remained. New ditches had been excavated and undoubtedly the land marks had been destroyed at that time.

The line was continued west to the eighteenth mile point crossing muskegs, streams, lakes and hills to where the iron bar marking the northwest corner of the block was established and turning here we ran the west boundary south six miles and planted another iron bar. When at this end of the block I sent to Savanne on the Canadian Pacific Railway and Kashaboiwe on the Canadian Northern Railway for supplies, there being a canoe route from both these places to Trout Lake, near the southwest corner of this block and completed the survey by running eighteen miles east to the place

of beginning.

The suface along the east boundary and the first six miles of the north boundary is for the greater portion level while it becomes rougher as we proceed west and the remaining portion of the boundaries range from undu-

lating to hilly.

Five and a half miles from the northeast corner the Savanne River is crossed and another stream flowing north of considerable dimensions that might be utilized for running timber, is crossed on the ninth mile. The timber towards the southwest would be taken out via Trout Lake to Kasha-

boiwe Lake and the Canadian Northern Railway.

There are several Lakes of considerable size either crossed by or in close proximity to the outlines on the north, west and south boundaries, the largest being Trout Lake, near the southwest corner of the block, which from the apparent accuracy with which it appears on the map would indicate that it must have been traversed some time in the past. The lake both as to position and dimensions, coincides very closely with its projection on the maps of the Department.

The land area is thickly timbered with poplar, birch, spruce, tamarac and pine, varying in size from underbrush to timber with a diameter of thirty inches. There has been excellent pine on the westerly six miles but this has been lumbered over for years to supply the mills at Savanne, and a large proportion of the best pine has been removed. There still remains

considerable good timber.

The soil throughout is of a sandy nature, while the growth of timber would indicate a fertile soil where not too wet. Along the west and south boundaries, the country is pretty rocky, the outcrop being granite of the Laurentian formation and the boulders piled up in heaps in several localities would indicate glacial deposits. No minerals of economic value were noticed, but in places the oxide of iron in the water would indicate the presence of that metal in those localities.

At the sixth mile post on the north boundary of Block No. 2, I planted an iron bar to mark the southwest corner of Block No. 3 and ran north six miles from this point and set an iron bar to mark the northwest angle of the block. From thence I ran due east eighteen miles and marked the northeast corner with an iron bar and thence south six miles to the southeast corner which was marked in a similar manner, viz., the initial letters "G.T.P.R." and the number of the block cut on the iron bar with a cold chisel, turned so as to face the block. From thence running west twelve miles we arrive at the northeast corner of Block No. 2, which completes the outlines.

The surface of this block especially along the north boundary is quite hilly and broken by wet spruce and tamarac swamps, some of which contain very fine tie timber. North of the Canadian Pacific Railway on the west boundary and along the north boundary for fourteen miles, the country is heavily timbered with spruce, and tamarac on low ground and poplar, birch, spruce tamarac and pine on the higher ground. In the vicinity of Dog River, which crosses the north boundary at the ninth mile post there is quite an area of sandy land timbered with Jack Pine suitable for tie timber. Between the third and fourth mile posts from the northeast corner we come into brulé or burnt country, part of which had been fire killed from twelve to fifteen years ago, and recently burnt over. The east boundary for about half the distance runs through burnt country and the first twelve miles of the south boundary passes through a country overrun by fires with the exception of a few green spruce or tamarac swamps. Nearly half the entire block has been burnt over. A line drawn from the eleventh mile on the south boundary to the fourth mile on the north boundary would mark approximately the part fire killed. Green timber occurs only in swampy spots on this burned area while the standing timber on the higher ground is mostly dead and blackened or already fallen and undergoing rapid decay.

There are many rocky ridges bearing north and south or nearly so. Along the south boundary we noticed several places where the Huronian formation alternates with the Laurentian, a vein or fault usually separat-

ing the two but no valuable minerals were seen.

The soil is generally a sandy loam and in some localities a pure sand,

such as produces the groves of Jack Pines.

Dog River which enters the block at the ninth mile post on the north boundary leaves it near the fourth mile post on the east boundary but follows the line southward to within a mile of the southeast corner of the block. There are several small lakes in the block. The largest noticed is situate near the northwest corner and locally known as Whitefish Lake. There are two Indian families resident here during the winter months having houses near the margin of the lake on the southwest shore. This lake forms a link in the canoe route from Savanne River to Dog River and also to Muskeg Lake. The portage from Savanne River to this lake is a little over a mile in length well opened out and frequently used.

For the purpose of locating the position of Block No. 4, I had the option of running a line north from the Canadian Pacific Railway at a point west of Savanne to the southwest corner of the block or of running north six miles from the northwest corner of Block No. 3 to determine the southeast corner of Block No. 4. The latter course I chose as the most convenient and accessible. Having returned to the northwest corner of Block No. 3, I started on the 19th of September to run the meridian outline north to establish the southeast corner of Block No. 4. At sixty-one chains on the fourth mile we arrived at the south shore of Muskeg Lake which we found to be upwards of two and three-quarter miles where crossed by the line from

south to north, the corner of the block falling in the lake twenty-nine chains from the east shore and forty-eight chains from the north shore. The lake from east to west where crossed by the south boundary is nearly three and a

half miles in length.

It will be seen from an examination of the notes that some difficulty was experienced in obtaining suitable data for the several triangulations. From Muskeg Lake, I ran the south boundary west to the grade of the Grand Trunk Pacific Railway and then returning to Muskeg Lake, I ran north to the northeast corner of the block and planted an iron bar, a wooden post having been planted as a witness to the southeast corner, twenty-nine chains east from the corner which falls in the lake. From the northeast corner of the block I ran due west twelve miles and planted an iron bar to mark the northwest corner, thence south six miles to the south boundary and returning east to the Grand Trunk grade, I completed the south outline and planted the iron bar at the intersection of this line with the meridian run from the north.

The surface along the east and north outlines is undulating to hilly, while the west boundary is comparatively level. The block contains very good timber, east of the railway, the best being north of Muskeg Lake. There has been excellent timber in the vicinity of the southwest corner but it has suffered much from the operations of the lumberman who could raft or drive it from here down the north branch of the Savanne River, which is quite a large stream, where it crosses the southwest corner of this block.

The timber consists of poplar, birch, spruce, tamarac and pine. A few good white pine trees were noticed as we ran the fourth and fifth miles on the north boundary. West of the railway on the south boundary there are some large poplar trees and good size birch as well as tamarac and spruce.

There is a heavy windfall on the west boundary of this block south of the railway grade, which in conjunction with muskeg makes that part very difficulty of access in summer. A strip of country near the railway right of way has been overrun with fire but at no great distance from the right of way. A belt of low flat country runs from the southeast to the northwest and this is followed by the Grand Trunk Pacific Railway. The road here is almost straight for a distance of twenty miles and the black decayed vegetable muck, full of roots, is about three feet deep overlying sand or clay. Those swamps are often underlaid with clay, beneath the vegetable mould, which forms the surface. On the higher ground the surface soil is sandy loam. There are a few rock outcrops, but considerable areas where no rock is seen.

Muskeg Lake, so called, at the southeast corner of the block is not what its name would indicate a marshy lake, but rocky with in many places fine sandy beaches and islands which would make it a model summer resort. It can be reached by canoe from the railway by following a stream and string of smaller lakes.

We secured some excellent potatoes grown by Indians at the west end of Muskeg Lake.

No minerals of economic value were seen in the block.

I have the honor to be,

Sir, Your obedient servant,

> (Signed) Thomas Fawcett, Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines.

(Appendix No. 26.)

TOWNSHIP OF BARKER, DISTRICT OF ALGOMA.

Guelph, Ont., Jany. 15th, 1908.

SIR,—I have the honor to submit the following report on the survey of the township of Barker, in the District of Algoma, made under instructions from your Department dated May 6th, 1907.

I left Missanabie Station on the Canadian Pacific Railway on June 3rd and arrived at the southwest corner of the township on June 14th.

The outlines of the township were run by Ontario Land Surveyor Alexander Niven, the north boundary being his base line of 1900, while the east, west and south boundaries were surveyed by him in 1906.

The township is nine miles square and is subdivided under the new

system approved by Order-in-Council dated April 24th, 1906.

A road allowance fifty links wide is left on each side of the outlines and a road allowance one chain in width between alternate concessions, *i.e.*, between two and three, four and five, six and seven, eight and nine, ten and eleven, and also a side road allowance one chain wide between lots six and seven, twelve and thirteen, eighteen and nineteen, twenty-four and twenty-five.

The lines were run in the centres of the road allowances.

Posts were planted on the concession lines between each of the lots, a post being planted on the centre line as a guide to the corner posts and marked with the lot numbers on the east and west sides and "R" on the north and south sides, and a post on the south side of the road allowance marked with the lot numbers on the east and west sides and concession number on the south side and "R" on the north side; and a post on the north side of the road allowance marked with the lot numbers on the east and west sides, the concession number on the north side, and "R" on the south side.

At a side road a post was planted at the intersection of the survey lines and marked "R" on each of its four sides. A post was also planted on each of the four lot corners and marked "R" on the two sides next to the road allowances and with the number of the lot on the east or west side and the number of the concession on the north or south side according to the corner on which it stood.

No posts were planted on the side roads at the blind lines.

There is an iron post one and seven-eighths inches in diameter at each of the township corners, marked "Barker" on the side facing the township.

An iron post, one and one-quarter inches in diameter, is placed beside the wooden post in the centre of the road allowance on the south boundary between lots twelve and thirteen, marked "R" on four sides, "Lot XII." on the east side, "Lot XIII." on the west side, "Con. I." on the north side.

An iron post one and one-quarter inches in diameter is also planted beside the wooden post at the intersection of the line between concessions six and seven with the side line between lots twelve and thirteen, marked "R" on the four sides, "Lot XII." on the east side, "Lot XIII." on the west side, "Con. VI." on the south side, "Con. VII." on the north side.

An iron post one and one-quarter inches in diameter is also planted beside the wooden post on the north boundary at the line between lots twelve and thirteen, marked "R" on the four sides, "Lot XII." on the east side, "Lot XIII." on the west side, "Con. XII." on the south side.

The surface of this township is comparatively level and there are no lakes or large streams.

A little south of the centre of the township there is a large swamp extending from lot six to lot twenty-four, and about two miles in width at the centre. This swamp is thinly timbered with small, scrubby trees, and the ground is wet and mossy.

The remainder of the township consists of low ridges of dry land and

intervening stretches of spruce swamp.

The soil is clay, and in the swamps the clay is overlaid with black muck varying from a few inches to a foot or more in depth and with a thick growth of moss. The swamps are not wet.

This land is well drained by a number of small creeks, and when cleared

will be good farming land.

No rock exposures were seen in the township.

Taking the township as a whole, probably three-fourths of it is suitable

for farming, the remainder being swampy.

The timber is chiefly poplar and spruce with some balm of Gilead, white birch, tamarac and balsam. The poplar is of good quality and in size runs from about twelve inches to twenty-four inches in diameter. The spruce as a rule is not large, very little of it being over twelve inches in diameter, and where the growth is large the trees are often thin on the ground. The township as a whole is not heavily timbered.

The summer of 1907 was warm and showery, with a great deal of cloudy weather, and on that account it was difficult to get astronomical observations.

There was no summer frost.

Game was not plentiful. A few moose were seen, but no other large animals.

Accompanying this report are the field notes of the survey, a map of the township, and a timber plan, all of which I trust will be found satisfactory.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) James Hutcheon,

Ontario Land Surveyor.

The Honorable.

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 27.)

TOWNSHIP OF COLQUIOUN, DISTRICT OF ALGOMA.

Orillia, November 20th, 1907.

SIR,—Pursuant to the carrying out of your instructions for the survey of the township of Colquhoun, in the District of Algoma, dated the 20th day of May, 1907, our party left Orillia on the 17th day of June, following, prepared to proceed to the locality of the work. Having been assured upon inquiry from the officials of the Temiskaming and Northern Ontario Railway that the line was in fair working shape as far as McDougall's Chute, we determined to go in by that route, thus cutting down the length of the canoe trip and saving time as compared with the Mattagami route. Owing to the usual delays incident to travelling over a railway in course of construction and in getting supplies and men to that point, it was the 25th of the month before we got our canoes into the Black River at a point about two miles

above McDougall's Chute and began the voyage down stream. We followed the Black River to its confluence with the Abitibi and thence down the latter stream to a point about five miles below the mouth of the Frederick House River, where a small stream known as the Driftwood enters on the west side. As this last mentioned stream flows directly through the township in question, we proceeded up stream in a southerly direction to the place where work was commenced. The canoe route from McDougall's Chute to the mouth of the Driftwood presents few difficulties, the notable exception being the stretch of rapids and falls, covering a distance of about five miles on the Abitibi, known as the Long Sault. The passage of this stretch occupied a day and a half, it being considered better to make double trips over the more dangerous parts than to invite almost certain disaster by allowing any but expert canoemen to make the passage. Only two portages occur on this rapid, both on the left side, and short, the first being about three chains in length and the second or lower one about ten chains. The Abitibi itself is a magnificent water stretch, in places a quarter of a mile across, sweeping northward in long easy curves with fairly strong current but very muddy water. The water in this and the Mattagami River is said to have reached an unprecedented height last spring owing to the great depth of snow in the winter. The season had been dry up to the middle of June, when the rains set in and through the whole duration of our trip there was scarcely a twenty-four hour interval in which rain did not fall, and it was a rare thing during the progress of the work for us to leave camp and return without a drenching. The weather conditions were in sharp contrast to those prevailing during the previous summer, which was exceptionally dry, and it rendered bush work in a country so thickly forested with evergreens and dense undergrowth unpleasant to a degree. Actual survey work was commenced on the 5th day of July, and we were again at McDougall's Chute on the return journey on the 7th of September following, having experienced no mishaps worthy of mention.

The township of Colquhoun is laid out in double front alternate concession, each concession thus having a road allowance in front and a blind line separating the concessions in the rear. The concessions are numbered from one fronting on the south boundary to twelve fronting on the north boundary, and have a depth approximating to fifty-nine chains and fifty links. The lots are numbered from one at the east boundary to twenty-eight at the west boundary, and have a frontage approximating to twenty-five chains and twenty-five links and an area approaching one hundred and fifty acres. Lots nine and ten are the furthest variants from these conditions. Side roads were laid out between lots six and seven, twelve and thirteen, eighteen and nineteen, and twenty-four and twenty-five, and allowances for road one chain in width were left around all lakes crossed by the lines run, and also along both banks of the Frederick House and Abitibi Rivers.

The survey was commenced from the southerly boundary, being the northerly boundary of the township of Calder, run by us last year; the side lines being run due north astronomically and being continuations of the several side lines in the township of Calder with the exception of that between lots twenty-four and twenty-five, which was commenced at a point thirty-three links west of the corresponding side line in Calder, giving lot twenty-five a width of twenty-five chains and twenty-five links. This northerly boundary of Calder had been run with special care, hubs being driven and pickets firmly planted in such a manner that it could be safely used as a base line to turn the several side lines from, and the value of this became evident as it was not until the beginning of August that we were able to obtain a satisfactory observation to check bearings, and when it was obtained showed

the bearings of the lines to be entirely satisfactory. From these side lines the several concession lines were turned east and west astronomically. Owing to the extremely rough nature of the country about the southeasterly corner of the township, and the water intersections at this point, it was deemed a most unsatisfactory place to commence the east boundary, which was therefore begun from the line between concessions two and by giving lots one to six a uniform width of twenty-five chains and twenty-five links. On running south to intersect the south boundary this line was found to be somewhat west of the point aimed at, which we believed to be due to errors in chaining, there being several very deep and steep gullies on the above concession line; as re-chaining for the third time, however, failed to reveal the discrepancy and angular checks proved the correctness of the bearing, we were fain to leave the puzzle unsolved. A difference also appears in the triangulations of the small lakes, entering lot one across the south boundary, from that of last year, the curious fact being that while the total distance across the lot agrees within a few links the individual lake distances do not, the easterly lake being wider than previously shown and the westerly one narrower owing to wrong base measurements being taken last year. As it is somewhat puzzling to understand the exact relationship of the several lines forming the boundaries of the four townships abutting at the southeasterly corner of Colquboun, a detail has been shown on page 66 of the field notes which clearly shows the relative positions of the three iron posts planted for these townships.

The posts planted in the centre of the road allowance along the north boundary of the township of Calder to mark the division lines between the several lots, with the exception of lots twenty-four and twenty-five previously mentioned, and those on the east boundary, are also the centre posts for the corresponding lots in the township of Colquboun.

The line run by O.L.S. T. J. Patten in 1904, on a bearing north no degrees ten minutes east astronomically, was used as the line between lots nine and ten across the first four concessions where it terminates at the correction line run by the same surveyor now forming the line between concessions four and five. From the line between concessions four and five to the north boundary of the township the meridian run by O. L. Surveyors Speight and Van Nostrand, in 1905, forms the line between lots nine and ten, thus leaving a jog in this division line on concession line four and five.

The lines were run in the centre of the road allowances, which were laid out of a perpendicular width of one chain. Upon all east and west lines wooden posts were planted to mark the division lines between the several lots. At the intersections of the interior side lines and concession lines five wooden posts were planted, one at the intersection of the lines marked "R" on four sides, and one at each of the abutting lot angles marked with the numbers of their respective lots and concessions and "R" fronting the road At boundary intersections three posts were planted marked in a similar manner, and at the extreme angles of the township, two posts. At the intervening lot lines between the side lines a post was planted on the centre line of the road allowance marked with the lot numbers on east and west sides and "R" on the north and south sides. Wooden posts were also planted on the centre line to mark the road allowances round lakes and along rivers, marked "R" facing the water. At all posts planted off the centre lines bearing trees were marked, and their bearings and distances from the several posts noted. The intersection of the lines between concessions six and seven, and side line eighteen and nineteen occurs in the Driftwood River, the posts for concession six being planted to the south, and those for

concession seven to the north along this side line. Where lot corners fell in lakes the posts were offset north and south in their proper positions. Beside the wooden posts iron posts one and one-quarter inches in diameter were planted at the following points: on the centre line of the road allowance between lots twelve and thirteen, at its intersection with the centre line of the road allowance along the south boundary, (this post is the same planted for the township of Calder), at the centre line of road between concessions six and seven, and at its intersection with the centre line of the road allowance along the north boundary. Similar posts were also planted on the centre line of the road allowance between concessions six and seven, at its intersections with the centre lines of roads along the east and west boundaries. An iron post, one and seven-eighths inches in diameter, was planted alongside a wooden post at the intersection of the centre line of the road allowance along the east boundary with the centre line of the road along the north boundary marked "R" on four sides, and "Colquhoun" on the southwest side, and a similar post at the intersection of the centre lines of the boundary road allowances at the northwest angle of the township, marked "R" on four sides, and "Colquhoun" on the southeast side. The iron post planted at the centre line of road allowance intersections to mark the northwest angle of the township of Calder, was marked "Colquhoun" on the northeast side. At the intersection of the centre line of the road allowance along the east boundary with the northerly limit of the road allowance round the shore of the small lake at the southeasterly angle of the township, an iron post, one and seven-eighths inches in diameter, was planted alongside a cedar post, and marked "R" on the south, east and west sides, "Colguhoun" on the northwest, and "Leitch" on the northeast.

The area covered by this township consists largely of fine agricultural land, of a sufficiently rolling character to afford effectual drainage. easterly portion bounded roughly by the line between lots six and seven, presents a decidedly rolling surface in many places broken by sharp ridges and gullies, and with the exception of the extreme southeasterly part well timbered with large spruce, poplar, white birch, balsam and tamarac; a large number of trees of the first two species exceeding twenty inches in diameter. Over most of this area there is also a thick growth of moosewood or mountain maple and alder, and a great deal of windfall. A number of small lakes of pond-like dimensions also occur within these limits. At the scutheast corner and extending as far north as the northerly limit of concession three on the east boundary, thence sweeping in a southwesterly direction to lot five on the line between concessions one and two, and again retreating southeasterly to the neighborhood of the small lakes at the southeast angle of the township is an area of fire-swept country, comprising about thirteen hundred acres. A great deal of the timber is still standing, but dead, and here and there within the area are small patches of green bush, partially fire killed. Along the east boundary across concession one, and the greater part of concession two occurs a succession of ridges so steep that they must measure very closely the angle or repose of the clay composing them, and packed as closely together as the depth of the intervening gullies will permit. These gullies are littered with windfall trees, and choked with dense undergrowth, rendering travelling extremely difficult and laborious. The soil near the steep gullies on lots three and four crossed by the line between concessions one and two is a coarse sand, the only place in the township where this was noted. The soil throughout the rest of this. area is clay of good quality.

The northwesterly portion of the township west of the Driftwood River, and mostly north of the line between concessions eight and nine is also sufficiently distinctive to be described by itself. This part consists of level or gently rolling country and fine loamy clay land. It has apparently been burned over at some earlier date and is reforesting with spruce, poplar and tamarac, seldom at the present time exceeding four or five inches in diameter, and at infrequent intervals contains small patches or belts of trees of larger growth. In this area there are also some patches of peat swamp or open spruce flats which will probably require artificial drainage to produce the best results. The land of this tract is excellently adapted for farming purposes, easily cleared, generally well drained and of fine quality.

The balance of the township has a gently undulating surface just sufficient to afford good drainage, and has throughout a good clay soil, generally somewhat loamy, and in places with a light covering of black mould. The whole of this tract is forested with the species previously mentioned but chiefly with spruce and poplar. The trees are of small diameter, it being unusual to meet with one much exceeding twelve inches except on the creek banks and the average diameter is much below this. On the whole the township presents a fine agricultural prospect and at least seventy-five per cent. of its area would be readily available for farming purposes.

With regard to timber value, it would offer more inducement to the manufacturer of pulp than to the sawmilling industry, though in the

easterly part some good timber might be procured.

The only rock outcrop met with, with the exception of some small showings of schist at the water level of the Driftwood, occurs on lots fourteen and fifteen where the line between concession two and three crosses apparently near its northerly edge. This outcrop consists of a number of bare hills of red granite apparently of eruptive origin, rising to a height of about one-hundred and fifty feet above the surrounding country; and from the summits of these hills a wide view of the surrounding country may be obtained, especially toward the northeast.

The main drainage channel for the greater part of the township is the creek or little river known as the Driftwood, which flows through a narrow valley depressed from twenty-five to one hundred feet below the level of the surrounding country, entering across the south boundary on lot twenty-four, and flowing northerly across the north boundary on lot thirteen, thus occupying in its general course a central position. This stream has an average width of from two to two and a half chains, and at ordinary water stages a sluggish current. It is capable, however, of accommodating a considerable volume of water, and by removing the rock dams which occur on its course, would furnish an excellent drainage outlet. There are several rapids on its course through the township, and at one place just south of the line between concession eight and nine, the stream drops about twenty feet in a distance of ten chains. There is not enough water passing through to form a power sufficient for commercial purposes beyond what would be required for a small mill working intermittently for local purposes. The Abitibi River crosses the extreme northeasterly corner of the township on lots one and two concession twelve, and the Frederick House River enters in concession eleven and forms its junction with the Abitibi on lot two, concession twelve. No falls or rapids occur on these streams within the boundaries of the The lake areas are small and of very minor importance, some being merely basins where water is held by the old beaver dams and could readily be drained. The general water supply is abundant, furnished by small streams, and of excellent quality. On lot five on the line between

concession six and seven there is a steep clay bank rising some thirty feet in height, and at its foot a number of springs break forth. The water in these springs is exceptionally clear and has a slight saline taste as if it had passed through strata containing common salt.

Berries of various kinds were abundant, including high-bush cranberries and elderberries. Wild strawberries were exceptionally large and abundant, ripening in August. A notable characteristic of the forest products of this part of the country is the immense number and great variety The wet season was apparently conducive to the of species of the fungi. growth of these forms of vegetable life, although even in the dry season of last year we observed large numbers of them, and from the middle of August they began to multiply in astonishing numbers and almost endless variety of form. Many edible species were observed, and this locality would abundantly repay the visit and close study of a competent mycologist, and would doubtless furnish new species to be added to the already long list of Could some one be induced to undertake the work and publish a reliable guide to the edible species, it would prove of great value, and enable the sojourner in the woods to add a very acceptable item to his bill of fare.

Very little game of any description was seen, only one moose and that one within the boundaries of the township. We have before noticed the disappearance of the grouse in the autumn of 1905, whether from being snowed under or other cause is unknown, and they have since been very scarce. This condition does not appear to be local but by the accounts of others to apply to the whole northern district. These birds were plentiful in the neighborhood of the Matagami River in September of 1905, and upon our return there in November had practically disappeared. At the latter date there was about a foot of snow. Beaver appear to have been entirely killed out in this part, and considering the importance of this valuable and interesting animal, both as a fur producer and a conserver of water supply in forest areas, an inquiry should be instituted into the cause of its disappearance, and a remedy, if possible, applied. We have heard fur dealers claim that over protection was the cause, the families becoming too numerous, but from our own observation believe the reverse to be true. Bird life, including many of our common southern species, was well represented.

Referring to the item in our instructions in regard to the right of way of the Transcontinental Railway, we found that the survey parties engaged in this location were still in doubt as to the exact final location and were still working when we left, in the Township of Calder, with the possible chance of cutting the present township close to the southwest corner. We

are consequently unable to shew this location on our plans.

We have the honor to be, Sir, Your obedient Servants,

(Signed) CAVANA & WATSON.

The Honorable,
The Minister of Lands, Forests and Mines,
Toronto, Ont.

(Appendix No. 28.)

TOWNSHIP OF JAMIESON, DISTRICT OF ALGOMA.

Sudbury, December 18th, 1907.

SIR,—I have the honor to submit the following report of the survey of the Township of Jamieson, in the District of Algoma, performed under instructions dated July 10th, 1907.

I proceeded to the work by way of Metagami Station on the main line of the Canadian Pacific Railway, July 22nd, 1907, thence by the usual canoe route down the Mattagami River, arriving at O.L.S. Niven's second base line on August second. The work of surveying the township of Jessop was commenced on August third, as per instructions but in ten days was compelled to abandon this work owing to disaffections among my men, on account of the wet and low nature of the ground, due to incessant rains and consequent drowned land and proceeded to subdivide Jamieson township, which was much better drained.

This township is bounded on the south by O.L.S. Niven's second base line run in 1905, and by the township of Godfrey, being surveyed this season by O.L.S. Green. On the west by O.L.S. Niven's meridian run in 1905, and by the unsurveyed lands of the Crown. On the north by the Township of MacDiarmid, being surveyed by O.L.S. Fitzgerald this season and on the east by the township of Jessop, being surveyed by the writer this season.

The survey of this township was commenced on August fourteenth by running a meridian line due north from O.L.S. Niven's sixth mile post on his second base line run in 1905, to the south boundary of Kidd and MacDiarmid, our line coming out two links east of the post planted for the southwest corner of Kidd. Posts were planted at every mile on this line for the several concessions, the sixth concession, however, was found to be seventynine chains and ninety-one links.

Posts were planted at the end of forty chains in every mile on O.L.S. Niven's second base line, forming the south boundary of the township to mark the width of lots not otherwise marked by mile posts.

Our chainage practically agreeing with that of O.L.S. Niven's on his base line in every mile, his mile posts were adopted as the starting points for our several meridians run due north through this township from the base line. The concession lines were run due west across the township from the posts planted on the east boundary every mile as before mentioned.

Where I started my survey at the southeast angle, I found a one and seven-eighths inch iron post marked "VIM" on the east side, on which I marked "Con. I" on the north side, "XII" on the east side, "I" on the west side, "Jamieson" on the northwest side, and "Jessop" on the northeast side. A wooden post found beside the iron post was similarly marked except for the words "Jessop" and "Jamieson." On the south boundary was found a one and one-quarter inch iron post marked "IX M" on the east side, on which I marked "VI" on the east, "VII" on the west, "Con. I" on the north. A wooden post beside it was similarly marked.

On the south boundary at the intersection of O.L.S. Niven's base line with his meridian run in 1905 was found a one and seven-eighths inch iron post marked "XII M" on the east "VIM" on the south on which I marked "XII" on the east, "Con. I" on the north and "Jamieson" on the north-

east side. A wooden post similarly marked except for the word "Jamieson" was found, both in a stone mound. On the east boundary between concessions three and four, I planted a one and one-quarter inch iron post marked "Con. IV" on the north, "Con. III" on the south, "XII" on the east and "I" on the west. A wooden post planted beside it was similarly marked.

On the front of concession four between lots six and seven, I planted a one and one-quarter inch iron post marked "Con. IV" on the north, "Con. III" on the south, "VI" on the east and "VII" on the west sides, respectively. A wooden post planted beside it was similarly marked. Where concession four intersected O.L.S. Niven's meridian line, (the west boundary), I planted a one and one-quarter inch iron post marked "Con. IV" on the north, "Con. III" on the south and "XII" on the east. A wooden post similarly marked was planted beside it and the distance north to O.L.S. Niven's IX M post was noted.

At the northeast angle of the Township I planted a one and seveneighths inch iron post marked "Con. VI" on the south, "XII" on the east, "I" on the west, "Jamieson" on the southwest and "Jessop" on the southeast. A wooden post similarly marked was planted beside it.

On the north boundary between lots six and seven was planted a one and one-quarter inch iron post marked "Con. VI" on the south, "VI" on the east, and "VII" on the west sides. A wooden post similarly marked was planted beside it and the distance to O.L.S. Fitzgerald's post noted. At the intersection of the north boundary (run by O.L.S. Fitzgerald this season), with O.L.S. Niven's meridian run in 1905, was found, a one and seven-eighths inch iron post marked "Con. I" on the north, "XII" on the east and "MacDiarmid" on the northeast to which I added "Jamieson" on the southeast, "Con. VI" on the south. A wooden post similarly marked except for the words "Jamieson" was planted beside it. All of the iron posts were of tubing, forged at the top, pointed at the bottom and painted red and all marking done with a cold chisel.

The wooden posts planted between lots two and three, four and five, six and seven, eight and nine, and ten and eleven, on the different concessions were marked according to the different lots and concessions to which they referred, that is, on north, south, east and west. The wooden posts planted on the different concessions between lots one and two, three and four, five and six, seven and eight, nine and ten and eleven and twelve, were marked on three sides only, that is on north, east and west sides, according to the different lots and concessions to which they referred. Bearing trees at a convenient distance were carefully marked and noted for every post planted by me.

The distances along the north boundary from my posts to those placed by O.L.S. Fitzgerald for Macdiarmid and along the west boundary to those placed by O.L.S. Niven were chained and noted in each case.

Observations on Polaris at Elongation for Azimuth were taken when convenient which was seldom on account of continual rain.

The magnetic variation was found to be fairly constant at eight degrees

All lines were well opened up and blazed and were run with transit and all are straight lines through the township from boundary to boundary except in one instance where a slight deflection was made after observing Polaris, viz., at front of concession three on line between lots three and four where it crosses Mattagami River. The traverse of Mattagami and Kamiskotia rivers was made with transit and micrometer.

GENERAL FEATURES.

The township is situated on the verge of the clay belt and except for part of the southwest quarter is practically level and for the most part rolling clay land. Numerous creeks found have cut the surface into deep ravines especially is this noticeable on both sides of Mattagami river and for some distance on each side of this river. Stretches of muskeg are scattered throughout the township, the largest area being in the eastern part and are moss covered to some depth.

Soil.

The soil for the most part was found to be clay loam, in some parts covered to some depth with black muck and moss, but which could be easily drained and burned. I would consider about seventy-five per cent. of the land area to be good agricultural land.

Rock.

Rock was encountered on lots six to twelve, concession one, six to ten, concession two, and seven to twelve, concession three, and was mostly of slate, some diabase, no indications of economic minerals were found. On lot eight, concessions two and three, there is a very high rocky hill from which the surrounding country could be viewed in every direction and which gradually descends to south and west. Boulders were numerous on lot eight and nine, concession three, and along concession two, lots eight, ten and eleven, also on line between ten and eleven, concession two.

TIMBER.

The township is well timbered throughout, cedar, spruce and balsam being most prominent along the river banks. On the higher ground back from the rivers are large, white spruce, balm of Gilead, poplar, white birch to six or eight inches and balsam.

Timber seemed to increase in size towards the rivers. The rocky hills in the southwestern part of the township were mostly covered with small Banksian pine About sixty per cent. of the township was thickly grown with tag-alders and other underbrush, making the work slow and laborious. Along the north boundary a brulé of six or seven years' age was met with on lots four and five and extending west to the river. Also in the northwestern part of the township a brulé of apparently the same age was found and is shown on accompanying timber plan.

WATER.

As will be seen from accompanying plans the township is well watered by rivers and numerous small creeks. Only three very small lakes or ponds were found, around which were marshy shores or floating muskeg. The Mattagami river enters the township in lot three, concession one, following an irregular course northwesterly and leaving in lot six, concession six, and is an average width of three chains and seventy-five links, being much swollen on account of incessant rains. The north branch of the Kamiskotia river enters the township from the northwest in lot twelve, concession six, flowing southeasterly over numerous rapids filled with rocks and boulders

and other obstructions, making canoeing dangerous, if not impossible, and reaching the Mattagami river in lot five, concession three, where it is about one and a half chains in width. A swollen stream enters the township from the west in lot twelve, concessions two and three, and enters the Kamiskotia river in lot eight, concession three, flowing over many rapids and jams of trees, only the upper part being navigable for canoes. A still smaller stream enters from the south in lot eleven, concession one, flowing northeasterly and reaching the Kamiskotia river in lot eight, concession three. This stream would be only an ordinary creek in dry weather, but was much swollen by continual rains. I noted the Mattagami and Kamiskotia rivers rise over eight feet at their junction after a thirty hours' rain in September.

The waters of the Kamiskotia river and its tributaries being spring fed ordinarily are very cold. I would not consider any of these rapids valuable for water power development on account of their source being spring creeks and rainfall, of which latter there was ample during our residence there.

GAME.

Evidences of moose, caribou and bear were plentiful. Fresh beaver work was frequently met with on the numerous creeks and marshes.

Partridge were plentiful, but we caught no fish.

Accompanying this report are general plan, timber plan, traverse plan, field notes and account.

I have the honor to be
Sir,
Your obedient servant,
(Signed) J. Henry Burd,
Ontario Land Surveyor.

The Honorable, The Minister of Lands, Forests and Mines, Toronto, Ont.

(Appendix No. 29.)

TOWNSHIP OF KENDREY, DISTRICT OF ALGOMA.

PETERBOROUGH, ONT., December 5th, 1907.

SIR,—I have the honor to submit herewith the field notes and plan of survey of the township of Kendrey, in the District of Algoma, performed under instructions from your department, dated the 6th May, 1907.

After taking the necessary observations, I commenced the survey, as instructed, at the northeast angle of the township of Bradburn, from this point, I ran the east boundary north astronomically.

To all the regular lots along the south boundary I gave a uniform width of twenty-five chains and twenty-five links. Lot one is nineteen chains and ninety-three links, and lot twenty-eight is thirty-five chains and seventy-three links.

All the side roads I ran north astronomically from the proper points on

the south boundary.

The west boundary I ran north astronomically from the northwest angle of the township of Bradburn.

As will be noticed by the plan I did not run the side line in the centre of the road allowance between lots twenty-four and twenty-five, through concessions eight, nine, ten and eleven. I thought it better to leave lots twenty-four and twenty-five through these four concessions extend to the road allowance along the Mattagami river on either side. That part of the above side road through concession twelve, I ran south astronomically from the proper point on the north boundary.

The concession roads, including the north boundary, I ran east and west astronomically from the proper points on Ontario Land Surveyor Speight's meridian to their intersections with the east and west boundaries of the

township.

Wooden posts of the most durable timber at hand were planted along the concession roads between the lots; one on the line itself as a guide post with the numbers of the lots on the east and west sides and "R" on the north and south sides, one fifty links north of the guide post and one fifty links south of the guide post with the numbers of the lots on the east and west sides and the number of the concession or "R" on the north and south sides as the case may be.

At the intersection of the centre line of the different concession road allowances with the centre line of the different side road allowances, durable wooden posts were planted, marked "R" on the north, south, east

and west sides.

Good wooden posts were also planted at the angle of each of the four adjoining lots marked with the number of the concession on the north or south sides as the case may be, and the number of the lot on the east or west side as the case might be, with "R" on the two sides facing the concession and side road allowances. These posts were planted at a distance of fifty links from the centre of the concession road allowance and fifty links from the centre of the side road allowances.

A road allowance of one chain in perpendicular width was left along each side of the Mattagami and Muskego rivers, also around all lakes cut by the concession or side lines and around all other lakes of any considerable area. All these road allowances are delimited by wooden posts planted on the lines of survey.

To all posts, with the exception of the guide posts and those defining a road allowance along lakes or rivers, bearing trees, were taken and recorded.

To make the survey as permanent as possible in case of fire, iron posts of the following dimensions were planted at the following points:—On the iron post one and seven-eighths inches in diameter planted at the southeast angle of the township, I marked "Kendrey" on the northwest side, the letter "R" had already been marked on the north, south, east and west sides.

On the iron post one and seven-eighths inches in diameter planted at the southwest angle of the township, I marked "Kendrey" on the northeast side, the letter "R" had already been marked on the north, south, east and west sides.

An iron post one and seven-eighths inches in diameter was planted at the northeast angle of the township marked "Kendrey" on the southwest side and "R" on the north, south, east and west sides.

An iron post one and seven-eighths inches in diameter was planted at the northwest angle of the township marked "Kendrey" on the southeast side, and "R" on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter at the intersection of the north boundary line with the line in the centre of the road allowance between lots twelve and thirteen marked "Con. XII" on the south side, and the letter "R" on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter on the east boundary line at its intersection with the line in the centre of the road allowance between concessions six and seven, marked "Con. VII" on the north side, "Con. VI" on the south side and the letter "R" on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter, on the west boundary line at its intersection with the line in the centre of the road allowance between concessions VI and VII marked "Con. VII" on north side, "Con. VI" on south side and the letter "R" on north, south, east and west sides. An iron post one and one fourth inches in diameter on the south boundary line at its intersection with line in centre of the road allowance between lots twelve and thirteen marked "Con. I" on the north side, and the letter "R" on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter at the intersection of the line in the centre of the road allowance between concessions six and seven with the line in the centre of the road allowance between lots twelve and thirteen marked "Con. VII" on the north side, "Con. VI" on the south side and the letter "R" on the north, south, east and west sides.

The most notable feature in this township is the Mattagami river which enters it from the south, on lot twenty-seven and flowing in a northerly direction, leaves it at lot twenty-four. It is a fine river, being from six to twelve chains in width with good current and a depth of from five to fifteen feet. There are no rapids and only one fall on the river, in its course through the township, this fall which is known as "Smooth Rock" occurs in concession ten, between lots twenty-four and twenty-five. I made a careful survey and estimate of the power available at this point, full particulars of which will be found in the notes.

There are a few small islands in the river in the township, which are of little value either for agriculture or as summer resorts.

The east branch of the Muskego river enters the Mattagami from a northwesterly direction, in concession five. It has an average width of one chain and fifty links with a fairly good flow of water.

There are only a few small lakes in the township, these as a general rule are shallow and have low shores.

The whole township may be described as more or less rolling in character, timbered with spruce (white and black) up to sixteen inches in diameter, poplar, (white and black) up to twenty inches in diameter, white birch, balsam and cedar up to ten inches in diameter with considerable windfall, willow and alder throughout. Numerous swamps of limited extent and covered with small spruce, occur in various parts. There is not more than one hundred and fifty acres of muskeg in the whole township.

The soil is a rich black loam from eight to twelve inches in depth with clay subsoil and entirely free from stone. A few small outcroppings of rock (Huronian) were noticed along the Mattagami river.

No indications of mineral were seen.

The average magnetic variation I found to be fairly constant at nine degrees and thirty minutes west.

Taking the township as a whole, I consider fully sixty-five per cent. suitable for immediate settlement and with a proper system of drainage nearly all the remaining thirty-five per cent. can be made suitable for

agriculture.

Several trial lines of the proposed Transcontinental railway cross the township in a northwesterly direction. I was unable, however, to definitely ascertain along which of these the road would be built. I have therefore made no record of them in the notes.

Fish and game were fairly plentiful, while fur seemed to be very

scarce.

Strawberries, raspberries, etc., fully matured, were to be had in abundance.

Observations for latitudes and azimuth were taken at several points,

records of which will be found in the notes.

Trusting the accompanying plans and field notes of the township will be found satisfactory.

I have the honor to be,
Sir,
Your obedient servant,
(Signed) J. W. FITZGERALD,
Ontario Land Surveyor.

The Honorable,

The Minister Lands, Forests and Mines, Toronto, Ont.

(Appendix No. 30.)

TOWNSHIP OF MACDIARMID, DISTRICT OF ALGOMA.

Peterborough, Ontario, December 5th, 1907.

SIR,—I have the honor to report the completion of the survey of the township of Macdiarmid in the District of Algoma, performed under instruc-

tions from your department, dated July 11th, 1907.

After taking the necessary observations, I commenced the survey at the southwest angle of the township of Kidd; from this point I ran the south boundary west astronomically to its intersection with O.L.S. Niven's meridian line. Along the south boundary, I gave the lots a uniform frontage of forty chains, lot twelve being thirty-nine chains and ninety-one links.

The side lines I ran north astronomically from the proper points on the south boundary.

The concession lines were run east and west astronomically.

The Mattagami river enters the township from the south at lot six, and flowing in a northerly direction leaves it at lot five. It has an average width of four to five chains, depth of from five to fifteen feet, with good current, and vegetation, as a rule, almost to the water's edge. There are no falls, rapids or islands on the river in this locality.

There are no lakes or ponds in this township...

As to the general character of this township, it may be described as a gently, undulating country, timbered with spruce (white and black), up to sixteen inches in diameter, poplar, white birch and balsam up to ten inches in diameter, with considerable willow and windfall throughout.

Large tracts, especially in the southerly portion of the township, were overrun by fire four years ago, and are now almost destitute of green timber. Swamps covered with small spruce occur at different points.

Generally speaking, the soil is a rich, black loam from eight to twelve

inches in depth with clay subsoil.

There are a few rock exposures (Huronian) along the river, also along the west boundary run by O.L.S. Niven; these, however, are generally of a very limited extent and will not materially retard the settlement of this district.

The average magnetic variation I found to be nine degrees west.

No indications of minerals were found.

I would consider about sixty per cent. of this township suitable for immediate settlement while about sixty per cent. of the remainder can under a proper system of drainage be made good paying agricultural land.

Fish, game and fur I found rather scarce in this vicinity, raspberries,

strawberries, etc., especially in the brules were very plentiful.

Trusting this report with the plans, field notes, etc., will be found correct and satisfactory to your Department.

I have the honor to be, Sir,

Your obedient servant,

(Sgd.) J. W. FITZGERALD, Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 31.)

TOWNSHIP OF LEITCH, DISTRICT OF ALGOMA.

Bracebridge, Ontario, December 21st, 1907.

SIR,—I have the honor to submit the following report on the survey of the township of Leitch, in the district of Algoma, made in accordance with instructions from your department, dated the 20th day of May, 1907.

With as little delay as possible, I proceeded by way of the Temiskaming and Northern Ontario Railway to the end of the steel of that line, and from there paddled down the Black and Abitibi rivers to the township, which is situated near the junction of the Abitibi and Frederick House rivers.

The north boundary of the township of Clute, surveyed by me last year, forms the south boundary of the township of Leitch, and I began the survey by planting the lot posts along this line, twenty-five chains and twenty-five links apart, leaving road allowance of one chain between lots six and seven, twelve and thirteen, eighteen and nineteen, twenty-four and twenty-five, with half a chain at the east and west boundaries.

The side roads were run from south to north, and the concession roads were run west from the district boundary, making the regular lots twenty-five chains twenty-five links in width, and fifty-nine chains fifty links in depth, with a road allowance of one chain between every second concession two and three, four and five, etc., and a blind line between the other concessions.

The district boundary run in 1898 forms the east boundary of the township, and the west boundary was surveyed during the present season by Messrs. Cavana & Watson.

Along the lines of survey in the centre of the several concession road allowances, posts were planted at the intersection of the lot lines, marked with the numbers of the lots on the east and west sides, and "R" on the north and south side; at the centre of the side road allowances the posts were marked "R" on four sides.

At the distance of fifty links north and south from the centre of the concession road allowances, posts were firmly planted at the front angles of the lots, and marked to indicate the number of the lot and concession, and with the letter "R" facing the road allowance.

Posts were also planted to mark the limit of road allowances around the shores of lakes and rivers; and where the front angle of a lot came in a lake or river, the posts were placed on the lot line at the distance of one chain from high water mark, and guide posts planted and trees marked near the shore so as to be readily found.

No posts were planted along the side roads to mark the blind concession lines.

In addition to the wooden posts referred to, iron posts, one and onequarter inches in diameter were planted in the centre of the road intersections at the following points: between lots twelve and thirteen on the south boundary, marked "Con. I" on the north side, and "R" on four sides.

Between lots twelve and thirteen on the line between the sixth and seventh concessions, marked "Con. VI." on the south side, "Con. VII." on the north side, and "R" on four sides.

Between lots twelve and thirteen on the north boundary marked "Con. XII." on the south side, and "R" on four sides.

On the line between the sixth and seventh concessions at the east boundary, and also at the west boundary, marked "Co. VI." on the south sides. "Con. VII." on the north sides, and "R" on four sides.

At the northwest angle of the township an iron post one and seven-

eighths inches in diameter was planted and marked "Leitch" on the south-

east side, and "R" on four sides.

At the southeast angle the iron post one and seven-eighths inches, for-

merely planted, was marked "Leitch" on the northwest side.

At the northeast angle the iron posts one and one-quarter inches, planted by A. Niven, O.L.S., at the 180th mile, was marked "Leitch" on the southwest side, and "R" on four sides.

At the southwest angle the iron post, one and seven-eighths inches, by O. L. Surveyors Cavana & Watson, was marked "Leitch" on the north-

east side.

TIMBER.

Black spruce forest extends over the greater portion of the township, on the higher lands these trees are from eight to twelve inches in diameter but the great bulk of this timber is somewhat smaller.

From one end to the other dead tamarac of about the same size is found. Poplar, white birch and balsam, six to eighteen inches in diameter, are quite common, and along the rivers and streams, white spruce, balm of Gilead, and cedar of larger size are scattered over the country, but no extensive tracts of large timber were met with.

Fire burnt over some comparatively small areas about 1905 or 1906, the largest of these burnt portions is near the east boundary, evidently starting from the Abitibi river.

Sort.

Sandy loam was found in a few places, while throughout the greater part of the country the soil is clay or clay loam, overlying which is a layer of vegetable matter several inches in thickness on the higher lands, and from one to three feet thick on the wet land; and evidently this soil is well adapted for agriculture.

ROCK.

At the different rapids in the Frederick House and Abitibi rivers, exposures of Laurentian gneiss and boulders of the same age occur, and also at lot twenty-two in the sixth and seventh concessions where a rapid stream flows over rocky beds of similar formation.

Aside from these exposures at the water levels of the streams, only one outcropping was observed, this is on lot eighteen in the fourth concession, where a ridge of gneissoid rock is exposed for a short distance. No indications of minerals of economic value were noticed.

WATER.

The Abitibi river flows through the northeast corner of the township with a moderate current, leaving the township on lot three, and is again crossed by the north boundary at lot twenty-eight, about five chains down stream from Kettle Falls; from here to the west boundary the current is quite strong and the river wide and shallow.

The Frederick House river, through the first and second concessions, flows with a continuous rapid current over a rocky bed, strewn with boulders and stones, making it a difficult stream to navigate with canoes; below this stretch of rapids this river becomes a large stream of from five to eight chains in width, flowing smoothly between gently sloping clay banks, until it discharges into the Abitibi, a quarter of a mile west of the township; the only break occurs in the seventh concession where a small rocky island causes a short rapid with a fall of one foot.

A stream of one chain in width enters the township from the south on lot twenty-five, and flows with average current through level country until it reaches the fifth concession, while from here until it empties into the Frederick House river this stream is a succession of rapids flowing over a bed of boulders and stones.

At a fall and rapids on lot twenty-two, concession seven, a head of twenty feet could be obtained, but the volume of water in this stream becomes so small at low water that as a water power it would be of little value.

Several small lakes are scattered over the township, they are generally

shallow with low marshy shores.

The water in these lakes and in the smaller streams is clear and of good quality.

GENERAL FEATURES.

In the vicinity of the rivers and extending for about one mile on each side, the land is rolling or undulating, and free from stone or boulders, while the surface of the country is from twenty to fifty feet above the surface of the water in the streams; this portion will become desirable agricultural land when cleared.

Nearly one-half of the township is practically level, and during much of this season was quite wet on account of the excessive rainfall, so that artificial drainage will be required for parts of the level areas.

On the whole about sixty per cent. of the total area will be good agricultural land after removal of the timber, and nearly all of the balance can be made good farming land by a system of drainage which will not be very expensive, as no drain would require to be of any great length to reach an outlet in a stream.

The usual game and fur-bearing animals are found here but are not

During the hunting and trapping season three Indians with their families reside in the township, but they do not appear to have made any permanent improvements.

The variation of the magnetic needle ranged from eight to ten degrees west of north.

Accompanying this report are a plan, timber map, field notes, etc.

I have the honor to be, Sir,

Your obedient servant,

(Sgd.) W. GALBRAITH, Ontario Land Surveyor.

The Honorable.

The Minister of Lands, Forests and Mines, Toronto, Ontario.

(Appendix No. 32.)

TOWNSHIP OF MCCOWAN, DISTRICT OF ALGOMA.

Pembroke, Ontario, December 11th, 1907.

SIR,-I have the honor to report that the township of McCowan in the district of Algoma has been surveyed in accordance with instructions from

your department, dated May 6th, 1907.

At present the most feasible route by which to reach this township is from Missinabie Station on the Canadian Pacific Railway via the Missinabie and Opazatika rivers to the crossing of the surveyed line for the National Transcontinental Railway which passes through the township of McCrae about three and one-half miles south of the southeast corner of this township.

The south boundary was surveyed in 1900 by Ontario Land Surveyor Alexander Niven. The east, north and west boundaries were surveyed in 1906

by Ontario Land Surveyor T. B. Speight.

The survey was commenced by chaining and posting the south boundary, and from the posts established on this line for the starting points for the centre lines or road allowances between lots six and seven, twelve and thirteen, eighteen and nineteen, and twenty-four and twenty-five, meridians were run north astronomically, and chords of latitude were run east and west astronomically in the centre of the road allowances between each alternate concession.

One half chain was allowed inside each of the four boundaries as half

of the width of the road allowance.

Guide posts were planted on the south and north boundaries marked "R" on the side facing the township, and lot numbers on the east and west sides, excepting at the intersection of centre lines of road allowances where posts were marked "R" on the east and west sides, and on the side facing the township, the lot posts being off-set to their proper position and marked "R" on the side facing the road allowance, the concession number on the opposite side and the lot number on the east and west sides.

At the intersection of the centre line of road allowances between concessions with the east and west boundaries, posts were marked "R" on the north and south sides and on the west or east side facing the township. At the intersection of side road allowances with concession road allowances posts were planted at the lot corners, marked "R" on the sides facing the road allowances, lot numbers on the east or west side and concession numbers on the north or south side as the occasion demanded, while, one marked "R" on four sides was placed at the intersection of the centre lines.

Where lot corners were broken by lakes the position of the posts were located by off-sets, etc., and posts were planted in accordance with instructions at the edge of the road allowance around the lake, guide posts being also planted. In all cases posts were made of the most durable wood available and firmly planted, bearing trees being marked for lot posts only and recorded in the field notes.

I planted iron posts one and seven-eighths inches in diameter alongside the wooden posts at the southeast and southwest angles of the township, marking the former "Neely" on the northeast side, "McCowan" on the northwest side, and "R" on the north, south, east and west sides, while the latter was marked "McCowan" on the northeast side, "Eilber" on the northwest side, and "R" on the north, south, east and west sides.

I planted iron bars one and one-quarter inches in diameter on the centre line of road allowance between lots twelve and thirteen at the following places, "viz.," at its intersection with the south boundary, marked "R" on the north, east and west sides; at its intersection with the centre line of road allowance between concessions six and seven, marked "R" on north, south, east and west sides; and at its intersection with the north boundary marked "R" on the east, south and west sides. I also planted an iron bar one and one-quarter inches in diameter at the intersection of the centre line of the road allowance between concessions six and seven with the west boundary, marked "R" on the south, east, and north sides.

The iron bar at the northeast angle of the township is marked "R" on the east, "Neely" on the southeast, "R" on the south, "McCowan" on the southwest, and "R" on the west side, while the bar at the northwest angle is marked "R" on the east, "McCowan" on the southeast, "R" on the south, "Eiber" on the southwest, and "R" on the west side.

Observations for azimuth were frequently taken to check the bearings of the lines. The magnetic variation was found to be about six degrees and fifteen minutes west.

There are a few small lakes or ponds scattered through the township with one fair sized lake on lots thirteen, fourteen, fifteen and sixteen, concessions eight and nine.

The township is well supplied with water, small creeks being numerous, the majority of which join, and from a stream about half a chain wide, and from two to four feet in depth, which crosses the east boundary near the line between concessions one and two, and which will form a good outlet for drainage.

The surface is level and gently rolling land covered with a dense growth of spruce from four to eight inches in diameter in the swamps, and poplar. spruce, balsam and birch from four to twelve inches in diameter on the higher lands. The timber at present is only suitable for pulpwood.

The soil is a good clay loam, mostly covered with moss which varies from one to two feet in depth in the swamps, and from three inches to one foot in depth on the rolling land. About fifty per cent. of the township will require the construction of drains before it can be cultivated.

No traces of economic minerals were seen, outcrops of rock being rare

and of small area.

The National Transcontinal Railway when constructed will make this township easy of access, and with the opening up of the country adjacent to the railway, I have no doubt that this township will become eventually a prosperous farming section, but at present is handicapped by the short season and summer frosts.

Game does not appear to be plentiful though occasionally traces of

moose and caribou were seen.

Accompanying this report are a general plan, timber plan and field notes.

> I have the honor to be, Sir. Your obedient servant, (Sgd.) JAMES L. MORRIS, Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto

(Appendix No. 33.)

TOWNSHIP OF MCCRAE, DISTRICT OF ALGOMA.

Eganville, November 2nd, 1907.

SIR,—I have the honor to report that in accordance with your instructions dated the 6th day of May, 1907, I have completed the survey of the

township of McCrae, in the District of Algoma.

With a party which numbered eighteen men all told, I left Missanabi Station on the Canadian Pacific Railway, on June 11th, and, crossing Dog Lake, Crooked Lake and Missanabi Lake, I went down the Missanabi river to the chain of portages leading to Lake Opazatika, and thence down the river of the same name until I reached the south boundary of my township. This is a good route in high water, using large canoes manned by experienced river men.

The east, south and west boundaries were surveyed in the summer of 1906, the north boundary in the summer of 1900, all by A. Niven, O.L.S. Taking Mr. Niven's field notes as a guide, I calculated the position of his five mile post on the south boundary with reference to the side line between lots thirteen and fourteen, and from this I chained east and west, making all of the lots twenty-five chains and twenty-five links wide, excepting lots one and twenty-eight, which I found to be twenty-five chains and nine links and thirty-five chains and thirteen links, respectively. Fifty links were allowed inside each of the four boundaries as half the width of a road allowance,

guide posts being planted on the south boundary, marked "R" on the north side, with lot numbers on east and west sides excepting at the starting points of the centre lines of side road allowances, where posts were marked "R" on east, north and west sides. The lot posts were planted in their proper positions at the corners of the respective lots one-half chain north and marked in accordance with instructions. Meridians were run north astronomically from posts established as starting points of the centre lines of road allowances between lots number six and seven, twelve and thirteen, eighteen and nineteen, and twenty-four and twenty-five, and chords of latitude were run in the centre of the road allowance between the alternate concessions on which guide posts were planted, marked 'R'' on the north and south sides with lot numbers on east and west sides, from which the lot posts were carefully located by perpendicular offsets, and marked "R" on the side facing the road allowance, the concession number on the opposite side, and the lot numbers on the east and west sides. At the intersection of these chords of latitude with centre line of side road allowance, posts were planted marked "R" on four sides, and posts planted at the corners of the adjoining lots marked "R" on the side facing the road allowances, the lot number on the east or west side and the concession number on the north or south sides as the occasion demanded. The road allowances were all made one chain in perpendicular width. intersection of all centre lines of road allowances with boundaries, posts were planted marked "R" on three sides only, the sides facing the adjoining townships being left blank.

Road allowances, one chain in perpendicular width, were left on each side of the Opazatika river and the navigable portion of the large creek which joins it on lot two, concessions five and six. At the intersection of centre lines with road allowances along these streams posts were planted at a perpendicular distance of one chain from high water mark, properly marked, and where the lot corners were broken by water the lot posts were established by means of offsets and guide posts planted at the shore. The posts were made of the most durable wood available and firmly planted where possible, but, owing to a late spring, the frost interfered with this part of the work in a great many places. Bearing trees for the posts at the lot corners were marked and recorded in the field notes.

I found an iron post one and seven-eighths inches in diameter at the southeast angle of the township, marked "Idington" on the northeast side and "McCrae" on the northwest, which I marked "R" on the north, east, south and west sides, and at the southwest angle of the township I found a similar post marked "McCrae" on the northeast side and "Barker" on the northwest side, which I marked "R" on the north, east, south and west sides.

At the intersection of the centre lines at the following places, iron posts one and a quarter inches in diameter were planted along side the wooden posts marked as stated. On the south boundary at centre of road allowance between lots twelve and thirteen marked "XII." "R" on the east, "Con. I." "R" on the north, and "XIII." "R" on the west side. At the intersection of centre line of road allowance between concessions six and seven with the east boundary, marked "Con. VIII." "R" on north side; "I." "R" on west side, and "Con. VI." "R" on south side, and at its intersection with centre line of road allowance between lots twelve and thirteen marked "R" on north, south, east and west sides, and at its intersection with west boundary marked "R" on north, east and south sides.

Iron posts, one and seven-eighths inches in diameter, were planted at the northeast and northwest angles of the township, the former being marked "Idington" on the southeast, "McCrae" on the southwest, and "R" on the north, east, south and west sides, the latter being marked "McCrae" on the southeast, "Barker" on the southwest, and "R" on the north, east, south and west sides.

Frequent observations for azimuth were taken, the magnetic variation was found to range from six to six and a half degrees west of the astronomic

north, six and a quarter degrees being a fair average.

The river Opazatika is a stream from two to three chains wide and from six to ten feet deep in high water. In the spring and during rainy seasons it has a considerable volume of water, but gets very low in dry summer seasons. Only one fall occurs on the river in its course through the township; this varies from ten to fourteen feet in height, but does not appear to me to be of any particular value as a power site, as, owing to the manner in which this stream floods its banks in high water, I consider it will be necessary to enlarge its cross-section at this point to increase the flow of the water in times of freshet to facilitate the drainage of the land above. Only one lake, on lot fifteen, concession seven, was seen, this being small. There are numerous creeks which will afford good drainage outlets when properly attended to. The surface of the township is level or gently rolling, and is covered, generally speaking, with spruce swamps with scattered patches of tamarac, the timber being from four to eight inches in diameter, excepting along the banks of the river and the large creeks, where I found a thrifty growth of white poplar from four to twelve inches in diameter, the large trees being an exception; this extends but a short distance from the banks of the streams. Small areas of dry land were found scattered throughout the township, and on this land the timber varies from six to fourteen inches in diameter.

No traces of economic minerals were seen, only two or three outcrops of rock of small area appearing in the township. A recent fire has run through the southwesterly portion of the township, and where the moss has been burned off a good clay soil is exposed. The remainder of the township is generally covered with moss from a couple of inches to two feet in depth, but the underlying soil appears to be a good clay, and this township will no doubt eventually be a good farming community when properly drained. Summer frosts, however, are quite prevalent at present.

There are indications of this whole township having been burned over at a date which I estimate to be from eighty to one hundred years ago, and the present growth of timber is too small to be of much commercial value.

Several lines have been surveyed for the National Transcontinental Railway through this township, and intersections with the different lines are shown in field notes, but it was impossible to say which, if any of them, is a final location, and none of them are shown on the plan.

Game does not appear to be very plentiful.

Accompanying this report are a general plan, timber plan, traverse sheet and field notes with the usual affidavits.

I have the honor to be, Sir, Your obedient servant,

> (Sgd.) HERBERT J. BEATTY, Ontario Land Surveyor.

The Honorable

The Minister of Lands, Forests and Mines, Parliament Buildings, Toronto, Ontario.

8 L.M.

(Appendix No. 34.)

TOWNSHIP OF REAUME, DISTRICT OF ALGOMA.

LISTOWEL, Ontario, December 21st, 1907.

SIR,-In pursuance with instructions dated May 6th, 1907, from the Honorable the Minister of Lands, Forests and Mines, I beg leave to report the following: I had the same difficulty this year in procuring suitable canoes for my trip. I had canoes ordered from the Peterborough firm and just when the time was up for delivery I received word that they could not be shipped. However, I was fortunate in getting canoes at Orillia and North Bay, after a delay of two weeks. I left Toronto on June 25th, 1907, and reached Englehart, via the Temiskaming and Northern Ontario Railway, on June 27th. This point is one hundred and thirty-eight miles north of North Bay, and was at that time as far north as the regular trains were running. From Englehart we travelled north on the contractor's construction train to McDougall's Chute, a distance of sixty-five miles, the steel on the railway was laid to this point on July 2nd. McDougall's Chute is situated on the Black River. left McDougall's Chute on July 2nd, with seven canoes, fourteen men, camp outfit and supplies, and got as far as the junction of the Black and Abitibi rivers that night, a distance of fourteen miles. The next day we travelled down the Abitibi to the boundary line between the townships of Pyne and St. John, on line between concessions two and three, a distance of nineteen miles. In this distance there are three small portages, one at Iroquois Falls, about five miles below the junction, and the other two at the Buck Deer rapids, ten miles below the falls. At these rapids we took our canoes down with a light load and portaged the remainder of our outfit. This rapid is not a bad one to run, but one has to be careful. We ran down on the left side for the upper part, and took the right for the lower part. The current in the Black river is very slow, but in the Abitibi it is rapid. The water in both these streams was very high, as the season was a late one. From this point on the Abitibi river I proceeded west along the line between concessions two and three in St. John township to the east boundary of the township of Hanna, a distance of six miles. It rained nearly every day on our way into the work so that we made very slow progress. On August 24th I commenced the survey of the township of Reaume at the southeast angle running north from the base line run by Ontario Land Surveyor Patten and west from the boundary line between the Districts of Algoma and Nipissing. During the survey of this township the weather was decidedly wet, the prevailing winds being southwesterly. I may say that I read the Act for the Preservation of forests against fire, once, but had no occasion to read it again.

The iron posts furnished me by your department I planted and marked

as follows:

The iron post, one and one-quarter inches in diameter and three feet long, planted alongside a wooden post on the east boundary of the township between concessions three and four, is marked "Con. III." on the south side, "Con. IV." on the north side, and "I." on the west side. The wooden post is simi-

larly marked.

The iron post, one and one-quarter inches in diameter, planted alongside a wooden post, intended to be planted on the south boundary of the township at the intersection of the side line between lots six and seven, is planted at chainage five and thirty-three one-hundredth chains, on said side line, as the corner comes in a lake. The post is marked "Con. I." on the north side, "VI." on the east side, and "VII." on the west side. The wooden post is similarly marked.

The iron post, one and one-quarter inches in diameter, planted alongside a wooden post, intended to be planted on the north boundary of the township, on the side line between lots six and seven, is planted at chainage sixty-seven and thirty one-hundredth chains on said side line, as the corner comes in a lake. The post is marked "Con. VI." on the south, "VI." on the east, and "VII." on the west. The wooden post is similarly marked.

The iron post, one and one-quarter inches in diameter, planted alongside a wooden post on the west boundary between concessions three and four, is marked "Con. 111." on the south side, "Con. IV." on the north side, and

"X." on the east side. The wooden post is similarly marked.

The iron post, one and one-quarter inches in diameter, planted alongside a wooden post at the centre of the township, where the side line between lots six and seven intersects the line between concessions three and four, is marked "Con. III." on the south side, "Con. IV." on the north side, "VI." on the east side, and "VII." on the west side. The wooden post is similarly marked.

The iron post, one and seven-eighths inches in diameter, planted alongside a wooden post at the northeast angle of the township, is marked "Con. VI." on the south, "Con. I." on the north, "Lot I." on the west, "Fournier" on the northwest, and "Reaume" on the southwest. The wooden post is

similarly marked.

The iron post, one and seven-eighths inches in diameter, planted alongside a wooden post at the southeast angle of the township, is marked "Con. I." on the north side, "Con. VI." on the south side, "XII." on the east side, "I." on the West Side, "Hanna" on the northeast side, "Reaume" on the northwest side, "Mann" on the southeast, and "Duff" on the southwest side. The wooden post is similarly marked.

The iron post, one and seven-eighths inches in diameter, planted alongside a wooden post at the southwest angle of the township, is marked "Con. I." on the north side, "Lot XII." on the east side, "I." on the west side, "Reaume" on the northeast side, and "Beck" on the northwest side. The

wooden post is similarly marked.

The iron post, one and seven-eighths inches in diameter, planted alongside a wooden post, at the northwest angle of the township, is marked "Con. VI." on the south side, "XII." on the east side, "I." on the west side, "Reaume" on the southeast, and "Beck" on the southwest side. The wooden

post is similarly marked.

Under the head of "Timber," I beg leave to report the following: The kinds of timber found in this township are in order of their relative abundance: spruce, poplar, tamarac, white birch, balsam, balm of Gilead, cedar and white spruce. The only place where I found white spruce and cedar was along the shores of the lakes and streams, and not much of it is found. The underbrush consists of moose maple, alder, hardhack and mountain ash. The black spruce is the prevailing kind of timber in this township, and the largest and best trees are found along the shores of the lakes and streams, and are considerably scattered. Small spruce and tamarac are the only kinds of timber found in the muskegs.

There is also a large quantity of poplar and white birch in this township, but is on higher land, and around the shores of some of the lakes and streams,

and is also scattered.

The tamarac is the same as I found last season, being all half alive, or dead, the reason of its dying, I learned from an old timer of the country, who says that this result was caused by a small insect.

The balsam is nearly all of small dimensions, the largest being found

along the streams and lakes.

There is not much balm of Gilead found in this township.

With respect to the reserving of any section for lumbering, I am of the belief that it is not necessary, as the good timber of large dimensions is scattered over the whole area, and not much in any one place, but all the timber is suitable for pulp wood.

We saw considerable game in this township, but principally moose and partridge. We fished in most of the small lakes, but were not very successful. The water in some of the lakes is clear and bright, and there is very little lime in it, as the water is quite soft. The lakes having the clearest water are those having no inlet or outlet. The water in the other lakes is

more or less colored from the streams emptying into them.

Under the head of "Soil" I beg leave to report that I found it to be principally clay and clay loam. On the lower levels there is a heavy growth of moss, then from four to eighteen inches of black muck, and then the clay. The black muck holds the water. Clay loam is found in the higher land, where there is not so much moss. In the muskegs, where the timber is small, I found a thin layer of moss, then a few inches of muck, then the clay. The muskegs have all clay bottoms. There is only one wet muskeg in this township, being parts of lots eight and nine, concessions three and four. The land in this part of the Province can be easily cleared, as the roots of the trees do not penetrate the clay, but seem to run along between the clay and the muck, and when the land becomes burnt over and drained, the stumps can easily be moved. The country, although generally flat and level, can easily be drained, as the stream beds are sufficiently low to afford good drainage. The land around some of the lakes is rolling.

Under the head of "Minerals" I beg leave to report that I found no rock any place, but I found a large boulder on the east side of the lake, on lot six, concession four, but was of no value. I broke off a few specimens and examined them under a glass. I also found some boulders on lot ten, conces-

sion six, samples of which I am forwarding to your Department.

The magnetic variation of the compass was very irregular, sometimes changing two degrees in ten chains. I found the greatest irregularity crossing lots eight and nine, concessions five and six. The variation on lot nine was twenty-three degrees west. The variation on side line between lots eight and nine, concession six, at sixty chainage, was twenty-seven degrees and thirty minutes west.

The wet weather greatly impeded our work; one week we remained in camp five days. In the month of July, rain fell on twenty-four days. In the month of August rain fell on twenty-five days, and in the month of September rain fell on twenty days and snow on two days. In October up to the 10th day rain and snow fell on seven days. There was frost at McDougall's Chute

on July 2nd. The next frost we had on August 26th.

With regard to the opening up and development of this township, would say that the Temiskaming and Northern Ontario Railway location runs north through the township of St. John and the Grand Trunk Pacific location runs east and west through the township to the north, so that this point will be within a few miles of the junction of the two, and when these lines are built the lands will be easy of access, and should become settled within the next few years.

I have the honor to be, Sir, Your obedient servant,

(Signed) E. D. Bolton, Ontario Land Surveyor.

The Honorable, The Minister of Lands, Forests and Mines, Toronto, Ont.

(Appendix No. 35.)

TOWNSHIP OF STAUNTON, DISTRICT OF ALGOMA.

Delta, Ont., November 28th, 1907.

SIR,—I have the honor to report that in accordance with your instructions dated the sixth day of May, 1907, I have completed the survey of the township of Staunton, in the District of Algoma.

I left Missanaibi Station on the Canadian Pacific Railway June 11th, with a party of fourteen men all told, crossing Dog Lake, Crooked Lake and Missanaibi Lake, I went down the Missanaibi river to the south boundary of this township, finding this route fairly good in high water with capable men in the canoes.

The east and south boundaries of this township were opened by Ontario Land Surveyor Niven in 1906, the west boundary and six miles of the north boundary were opened by Ontario Land Surveyor Speight in 1906, the other three miles of the north boundary were opened by Ontario Land Surveyor Niven in 1900. Using Ontario Land Surveyor Niven's notes as a guide for the south boundary and calculating the positions of the side lines between lots six and seven and twelve and thirteen with reference to the mile posts, I began the work of making all lots twenty-five chains and twenty-five links wide with the exception of six, twelve and twenty-eight, on the south boundary, making lot six twenty-five chains and forty-two links wide. In lot twelve we found a small lake and after leaving a road allowance about the same this gave lot twelve a width of thirteen chains and twenty-seven links.

Lot twenty-eight was made thirty-four chains and thirty-five links wide

on the south boundary.

A width of fifty links was allowed within this township on each boundary as one-half the width of a road allowance, and within the township a width of one chain along each side line and concession line allowed for road purposes. Guide posts being planted in the south boundary marked "R" on the north side with the lot numbers, on the east and west sides excepting at starting points of centre lines of side road allowance, where posts were marked "R" on the east, north and west sides. The lot posts were planted in their proper positions at the corners of the respective lots one-half chain north and marked in accordance with instructions.

Meridians were run north astronomically from posts established at starting points of the centre lines of road allowances between lots six and seven, twelve and thirteen, eighteen and nineteen and twenty-four and twenty-five. Chords of latitude were run in the centre of the road allowance between the alternate concessions on which guide posts were planted marked "R" on the north and south and lot numbers on the east and west sides from which the lot posts were carefully located by means of perpendicular offsets and marked "R" on the side facing the road allowance, concession number on the opposite side and lot numbers on the east and west side. At the intersection of these chords of latitude with the centre line of side road allowance posts were planted marked "R" on the four sides, and posts planted at corners of adjoining lots marked "R" on side facing road allowance, the lot number on the east and west side and the concession number on the north or south side as concession demanded.

Road allowances one chain in perpendicular width were left on each side of the Missanaibi river, at the intersection of centre lines with the stream we planted posts one chain from the water mark, and on either side planted posts fifty links perpendicular from the centre line and one chain

perpendicular from the water line. Where lot corners were broken the lot posts were established by means of offsets and guide posts planted at the shore. Posts were made of the durable wood available and firmly planted where possible, frost interfering at the beginning of the work. Bearing trees were taken and recorded in the field notes for all lot posts.

I found an iron post one and seven-eighth inches in diameter at the southeast angle of the townships marked "Barker" on the northeast and "Staunton" on the northwest and on the southwest, northwest and northeast corners I found similar bars marked in a similar way. At the intersection of the centre lines at the following places iron bars one and one-quarter inches in diameter were planted alongside the wooden posts marked as stated. On the south boundary at centre of road allowance between lots twelve and thirteen and marked "Con." 1 "R" on the north, "XII" "R" on the east side, and "XIII." "R" on the west side.

At the intersection of centre line of road allowance between concession six and seven with the east boundary marked "Con. VII." "R" on the north side and "Lot I." "R" on the west side, and "Con. VI." "R" on the south side, and at its intersection with the centre line of road allowance between lots twelve and thirteen and marked "R" on the north, south, east and west, and at its intersection with the west boundary marked "Con. VII." on the north, "Con. VI." "R" on the south and "R" on the east side. At the north boundary at the intersection of the centre of road allowance between lots twelve and thirteen marked "XII." "R" on the east, "XIII." "R" on the west and "R" "Con. XII." on the south side.

Frequent observations for azimuth were taken, and magnetic variations noted to vary from six to seven and a half degrees to the west, a fair average,

I consider, to be six and three-quarters west of the true meridian.

The Missinaibi river is a swift stream from five to eight chains in width and from four to twenty feet deep in high water. There are a number of small rapids through the township, but the most important for water power purposes and most dangerous to canoe men are the Beaver and Glassy falls, the former has a broken fall of twenty feet or more, the latter a clear drop of seventeen feet in high water time. This stream is a very swift, dangerous one throughout this township and should not be attempted by inexperienced canoe men under any circumstances. There are several small creeks draining the adjacent land to the river that appear to me to offer good outlets for any drainage work contemplated in the future. Along the river is a rolling or hilly country timbered with spruce and poplar from four to fourteen inches in diameter. Back from the river we find mostly a fairly level spruce country, there being occasional patches of dense alders with poplar and spruce ridges. The tamaracs of this country are mostly dry and those green tamaracs found were small and of no value as tie timber.

No traces of economic deposit were noticeable and the only bit of rock seen in the township being along the river. In the swamps is a heavy muskeg or moss from five inches to two feet in depth which holds the frost and does not allow the heat to get to the clay soil beneath. This clay would be a good agricultural producer in my opinion and will no doubt yet be a valuable asset to Ontario after proper drainage and clearing of the land. The absence of the summer frost was quite noticeable, and at the Northern Transcontinental Railway cache the keeper had an abundant garden of vegetables grown by himself and this cache is some two miles north of our northern

boundary.

There are indications which lead me to believe that this township has been entirely burnt over some seventy-five or one hundred years ago, and the slow growth of timber does not leave that product of much value for lumber, but will be excellent for pulp. The poplars ranging four to fourteen inches

and the spruce from three to nine inches.

Game does not appear to be over plentiful, no wolves were heard through the entire work, fish in the river are not plentiful, speckled trout and pickerel being caught around the falls and pike being picked up along the stream. the absence of Indian camps and nets led us to the opinion that it was not considered a good fish stream.

Accompanying this report is a general plan, timber plan, traverse sheet,

and field notes, with the usual affidavits.

I have the honor to be,

Sir,

Your obedient servant,

(Signed) WALTER BEATTY,

The Honorable,

O. L. S.

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 36).

TOWNSHIP OF STRATHEARN, DISTRICT OF ALGOMA.

TORONTO, March 1st, 1907.

SIR,—In accordance with instructions dated the 15th day of May, 1906, having completed the survey of the township of Gallagher, I proceeded to the southeast corner of the township of Strathearn, where I found an iron bar along side a wooden post marked "XXXIII" on the northeast side, "XXXIV" on the northwest, "XXXII" on the southwest and "XXXI" on the southeast sides; here I planted a new wooden post and an iron bar one and seven-eighths inches in diameter, marked "Con. I" the north side, "Strathearn" on the northwest side and "one" on the west side, and ran a chord of latitude due west astronomically for the south boundary and a meridian due north astronomically for the east boundary, the former being run a distance of five miles, sixty-nine chains and eightyone links to its intersection with a line run due south astronomically from O.L.S. McAree's posts planted at the northwest corner of this township The east boundary was run to its intersection with the southeasterly shore of Lake Como, posts being planted every eighty chains for the respective concessions, and the north boundary was run east astronomically from McAree's posts above referred to, to its intersection with the northwesterly shore of Lake Como, the northeast corner of the township being in the lake. Posts were planted on the south boundary at a distance of forty chains apart for each of the lots up to and including lot eleven, except when lot corners come in water. Lot twelve was found to be twenty-nine chains and eightyone links wide.

The subdivision of the township was proceeded with in accordance to general instructions, meridians being run due north astronomically from the proper posts on the south boundary and the concession lines being run due west astronomically from the different posts on the east boundary, suitable wooden posts being planted on the concession lines at all lot corners, excepting where these were broken by lakes, in which cases the posts were planted in accordance with instructions.

Iron bars one and seven-eighths inches in diameter, properly marked, were planted at the following places: At the intersection of the east boundary with southeasterly shore of Lake Como, marked "Con. VI" on the north side, "Strathearn" on southwest, and "I" on west side, at the southwest corner of the township marked "Con. I" on the north side, "Strathearn" on northeast, and "XII" on east sides at the northwest corner of the township marked "Con. VI" on south side, "Strathearn" on southeast, and "XII" on east side, and at the intersection of the north boundary with northwesterly shore of Lake Como marked "Con. VI" on south side and "Strathearn" on southwest sides.

Iron bars one and one-quarter inches in diameter were planted at the following places: On the south boundary at its intersection with westerly shore of small island in lake on lots six and seven, marked "Con. I" on north side, at the intersection of line between concessions three and four with line between lots six and seven marked "VI" on east, "Con. IV" on north, "VII" on west and "Con. III" on south, at the intersection of line between lots six and seven, with the north boundary of township, marked "\I" on east. "Con. VI" on south, and "VII" on west sides, on the east boundary at the commencement of line between concessions three and four marked "Con. IV" on north, "I" on west and "Con. III" on south side, and at the intersection of line between concessions three and four with the west boundary, marked "Con. VIII" on south, "XII" on east, and "Con. IV" on north sides.

A settler named Picard has a clearing on lot six, concession four, on both sides of the Canadian Pacific Railway, of about eighty acres, has four small log houses occupied by his hired men, a good barn and a small wharf on Lake Como. The cleared land is a good sandy loam and when I saw the farm last in August, the crop, hay, oats, potatoes and garden stuff was looking

well, hay and oats harvested.

The south part of this township is rolling and in some places with hills as high as one hundred feet or more. The soil is generally light and stony but some very good patches of loam, both sandy and clay, especially on the east shore of Lake Como and the west shore on concession four, (Picard settlement); Lake Como extends from near the centre of the township to and out of the northeast corner, with a width of about a mile and a half, and is well stocked with salmon trout, white fish and pike. This lake, no doubt, in the near future will become a popular summer resort from its easy access by rail. The timber in the township is principally poplar, white birch, and jack pine on the high land, and spruce, cedar and tamarac in swamps. There are patches of burnt country in the northeast quarter of the township. There were no economic minerals found, the rock formation is Laurentian.

The islands in the different lakes were carefully surveyed and prominent trees marked with respective numbers of the islands, these are set forth on

the traverse sheet.

The Canadian Pacific Railway runs through this township crossing the east boundary about the centre of concession one, and crossing the west boundary about the centre of the sixth concession, the width of the right-of-way being two hundred feet throughout the township.

Accompanying this report are a general plan, timber plan, field notes

and traverse sheet.

I have the honor to be Sir.

Your obedient servant,

(Sgd.) WALTER BEATTY, Ontario Land Surveyor.

The Honorable,
The Minister Lands, Forests and Mines,
Toronto, Ont.

(Appendix No. 37.)

TOWNSHIP OF GALLAGHER, DISTRICT OF ALGOMA.

Delta, Ontario, March 1st, 1907.

SIR,—I have the honour to report that in accordance with instructions, dated the 15th day of May, 1906, I have surveyed the township of Gallagher.

I commenced my survey at the southwesterly corner of the township, because it was more easily reached than the southeasterly corner, and ran a chord of latitude due east astronomically to intersection with westerly boundary of the township of McNaught produced southerly, making lots 12 to 2 inclusive, the uniform width of 40 chains, and lot one being 39 chains and 82 links wide. The west boundary was run due north astronomically to its intersection with the south boundary of the township of Cochrane, concessions one to five being made 80 chains deep. The subdivision was then proceeded with, by running the side lines due north astronomically from the proper points on the south boundary, and the concession lines being run due east astronomically from the west boundary. Suitable wooden posts were planted at the lot corners on the concession lines excepting where corners came in water, in which cases posts were planted in accordance with instructions. Iron bars 1 7-8 inches in diameter are planted at the four corners of the township, the one I planted was the southeast corner, being marked "I" on west, "Gallagher" on northwest and "Con. I" on north side, the one at the northeast corner of the township is marked "I" on west, "Gallagher" on southwest, "Con. VI" on south, "McNaught" on southeast and "XII" on east side, the one at the southwest corner is marked "XII" on east side, "Gallagher" on northeast, "Con. I" on north, "Chapleau" on northwest and "I" on west side, and the one at the northwest corner of the township is marked "Con. VI" on south, "Gallagher" on southeast, "XII" on east, "I" on west and "Chapleau" on southwest side.

Iron bars one and one-fourth inches in diameter were planted at the following places and marked as hereafter stated. On the south boundary line between lot six and seven, marked "VI" on west, "Con. I" on north, and "VI" on the east side; at the intersection of line between lots six and seven with line between concessions three and four marked "Con. III" on south, "VI" on east, "Con. IV" on north and "VII" on west side; on the west boundary at line between cons. three and four marked "Con. III" on south, "XII" on east, and "Con. IV" on north side; and at the intersection of line between concessions three and four with the east boundary, marked

"Con. III" on south, "I" on west and "Con. IV" on north side.

Frequent observations for azimuth were taken, the variation of the

magnetic needle being fairly constant at $3-\frac{1}{2}$ ° west of the true north.

This township is much broken by lakes taking up in all about 15 per cent. of the total area. Loon Lake extends from the northeast corner of lot eleven, concession one, to and across the north boundary of the township, and has a large number of islands, many of which are suitable for camping purposes, and as this lake abounds with pike and salmon trout, it will probably become a favorite summer resort. All of the islands were carefully surveyed and a prominent tree marked on each as shown on the traverse sheet. The land is mostly sandy and stony, the southwesterly portion is rolling and broken, rocky ridges showing in places. The remainder is fairly level, but is not suitable for agricultural purposes. All of the township, excepting the northeasterly quarter is brule of about fifteen years' date with scattered patches of green timber, the northeasterly quarter is covered

with mixed timber, white birch, poplar, balsam, spruce and banksian pine from four to twelve inches in diameter, with small scattered groves of red and white pine.

No indications of economic minerals were noted and there are no water

powers in this township.

Accompanying this report are a general plan, timber plan, traverse sheet and field notes.

> I have the honour to be, Sir. Your obedient servant,

(Sgd.) WALTER BEATTY. Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 38.)

TOWNSHIP OF DEVITT, DISTRICT OF ALGOMA.

Delta, Ontario, December 18th, 1907.

SIR,—I have the honor to submit the following report on the survey of the township of Devitt in the district of Algoma, performed under instruc-

tions from your department, dated May 6th, 1907.

This township is bounded on the south by the township of Staunton, which was subdivided by me this year, on the east by the township of Eilber, and on the north and west by unsurveyed lands of the crown. At present, access to it is most easily obtained by means of the canoe route from Missanabi Station on the main line of the Canadian Pacific Railway, through Dog Lake, Crooked Lake, Missanabi Lake and down the river of the same

name which passes through the southeast corner of the township.

I commenced my survey by chaining and posting the south boundary from the southeast corner, westerly, the posts being planted in accordance with instructions, leaving a road allowance, one chain wide between lots six and seven, twelve and thirteen, eighteen and nineteen and twenty-four and twenty-five, and projecting meridians north astronomically in the centre of these road allowances. A road allowance, one chain wide was left between the alternate concessions, the centre lines of which were run due east and west astronomically. Suitable wooden posts of the most durable material available, and properly marked, were planted along the concession lines and along the road allowances adjoining lakes and streams in accordance with instructions, the necessary information being recorded in the field notes.

In addition to this, iron bars, one and one-quarter inches in diameter, were planted on the side line between lots twelve and thirteen at its intersection with the south boundary marked "R" on north, south, east and west sides, and "Con. I" on north, at its intersection with line between concessions six and seven, marked with four "R's" and at its intersection with the north boundary marked "R" on east, south and west sides, also on line between concessions six and seven at its intersection with road allowance around lake on lot one, marked "R" on south, east and north sides, and "I" on west, and at its intersection with west boundary marked "R" on north, east, and south sides.

The one and seven-eighths inch iron bars are marked at the southeast corner of the township "ACIA. M., "Devitt" on northwest, "Barker" on southeast, "Eilber" on northeast, and "Staunton" on southwest sides; at the southwest corner, "CVIIIM." on east side, "Staunton" on southeast, and "Devitt" on northeast sides; at the northeast corner, "Devitt" on southwest, "Eilber" on southeast, "IXM" on south, and "R" on west and south sides; and at the northwest corner "Devitt" on southeast, "IXM. +08 links" on south and "R" on south and east sides.

The field notes were systematically kept with a view to showing all chainages, posts and bearing trees, size and quality of timber, character of soil, creeks and other information acquired through the progress of the survey.

Frequent observations on Polaris at elongation were taken for azimuth and the magnetic variation was found to be fairly constant at six degrees and thirty minutes west.

The surface of this township is of a flat or gently undulating character, fully eighty per cent. being swampy and few outcrops of rock were met with, these being of small area.

The soil appears to be of excellent quality, being clay and clay loam, and is generally covered with a light deposit of black mould. As is usual in this country, the soil in the low lands is covered with a thick growth of moss, and will require drainage before it can be cultivated to advantage.

The main drainage channel is formed by Six Mile Creek, which flows diagonally through the township and empties into the Missanabi river. The flow of this stream is retarded at intervals by natural dams of boulders, forming small rapids which, if removed, would greatly increase its carrying capacity. One fair sized lake and three small ponds only were seen, but the township is well watered, small creeks containing fair drinking water being scattered throughout.

Spruce is by far the most abundant timber, with poplar, white birch, tamarac, balsam and cedar following in order and seldom exceeding ten inches in diameter. This timber is of little commercial value, except for puplwood and fuel, but it is very plentiful. The bush is generally thick, and in places is filled with underbrush.

Moose were seen occasionally through the summer, and the presence of numerous "dead falls" show that fur-bearing animals such as martin, fisher, etter, etc., are not wanting.

Wild strawberries were found on the fourteenth of August, and a few raspberries were seen in the windfalls. No traces of economic minerals were noticed.

The National Transcontinental Railway will, when constructed, pass through this township, but at present the exact location has not been decided.

Accompanying this report are a general plan, timber and field notes.

I have the honor to be, Sir. Your obedient servant, (Sgd.) WALTER BEATTY, Ontario Land Surveyor.

The Honorable.

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 39.)

TOWNSHIP OF BOWYER, DISTRICT OF NIPISSING.

LITTLE CURRENT, October 19th, 1907.

SIR,—I have the honor to submit to you the following report on the survey of the township of Bowyer, in the District of Nipissing, under instructions from your department dated June 11th, 1906.

On account of the Ontario and Quebec boundary survey occupying nearly the whole season. I did not attempt to subdivide the township last year.

I left here on July 2nd and travelled by way of McDougall's Chute and Black and Abitibi rivers, and arrived on the ground on the 11th July. On the following day, I commenced the survey at O.L.S. Galbraith's 42 mile+ 9 chains post, where his base line intersects Abitibi Lake, and which forms the southeast angle of the township of Bowyer. His base line forms the south boundary of this township. Lots 40 chains in width were laid out along this boundary, and our lines were run from Galbraith's mile posts on it. The township of Galna lies to the south of Bowyer. The north boundary was run due east from O.L.S. Newman's posts at the northeast angle of Marathon, and the east boundary was run due north from O.L.S. Galbraith's 42 mile post on the base referred to 9 chains west from the shore of Abitibi Lake.

Lot "A," concession I. is bounded by this line run due north and Abitibi

Lake.

Regular lots 40 chains in width and 80 chains in depth or thereabouts were laid out throughout the township. All lines were run east and west, and north and south astronomically. A 6 inch Burt's solar compass was used to obtain the meridian.

Six inch posts, except in a few places where the timber was small, were planted at the corners of lots, and the proper lot numbers cut thereon. The lot numbers and the name Bowyer were cut on the wooden and iron posts already planted at the southeast, southwest and northwest corners of the

township.

At the northeast angle, an iron post $1\frac{7}{8}$ inches in diameter was planted beside the wooden one, with the name of township and lot numbers cut on it in the usual way. Iron posts $1\frac{1}{4}$ inches in diameter were also planted where the line between concessions 3 and 4 intersects the east and west boundaries, also where the line between lots 6 and 7 intersects the north boundary and the line between concessions 3 and 4, this being the centre of the township. Where the line between lots 6 and 7 intersects the south boundary, one had been planted by O.L.S. Galbraith.

The survey lines on the Transcontinental Railway were intersected in a great many places by our lines, but I have shown on the plan where it is said by their engineers the line will probably be located. Near the confluence of the Circle and Low Bush rivers, a start had been made just before we left the vicinity, about the end of September, to cut the right of way.

On the Low Bush river in lot 7, concession 5, there is a water power from a 6 foot fall. I have calculated the power at about 630 h.p. at average low water (see p. 23 in field notes). As there are banks rising to about 30 feet on either side of the fall, it is possible that a considerable power might be developed.

I took very great precaution against forest fires by instilling into every one of the party the necessity of being careful about fire, and seeing that no fire was left at any place.

Nearly every day in the week it rained during nearly the whole time we were engaged, and one or two days or more in the week the rain was heavy enough to compel us to quit work. This, no doubt, owing to the great tracts of wet country and unbroken forest, is peculiar to the country.

The lines were well cut out and blazed.

The township for farming purposes may be called very good. The land is nearly all clay, and has a large percentage dry enough on nearly every lot to enable a settler to clear and produce a crop in a short time. On lot 8, concession 2, there are about 40 acres of rock which probably is all there is in the township, except at the rapids along the Low Bush river.

In concessions 3, 4 and 5 near the west boundary there are about 2,000 acres of very wet muskeg, in which there is very little timber. very small percentage of muskeg in the balance of the township. The township is fairly level.

The Low Bush, Circle and Dokis rivers, which flow through a great portion of the township are fine streams, and make the country most attractive. With the exception of some rapids near the north side of the township on the Low Bush river, the rivers flow with a gentle current, and have a good depth. They empty into Abitibi Lake near the east boundary. The Dokis river is from one to two chains wide, the others average nearly three chains wide.

The timber is black spruce, poplar, birch, balsam, balm of Gilead and jack pine, also dry tamarac. With the exception of the jack pine, the timber is pretty evenly distributed, and attains in places a considerable size, the black spruce up to 13 inches in diameter and the jack pine 15 inches, the poplar to 20 inches.

The jack pine is principally in the 5th and 6th concessions.

On the line between concessions 3 and 4, across parts of lots 4 and 5, there is a distinct path of a cyclone about 1,000 feet wide in a southeasterly course.

Small game is very scarce. There were tracks of moose and red deer and bear. Some pike and pickerel were caught in the rivers.

Small clearing on lot 1, con. 3, also small clearings and houses on lots 6 and 7, con. 4, are shewn in notes and plan. In the returns is enclosed a schedule regarding them.

Wild currents, skunk berries, high bush and swamp cranberries are the principal small fruits.

The measurements on the traverse of the waters were made with a Stadia.

No minerals were found.

The west boundary was not measured. The lengths of the lots are deduced from the closing of the concession lines with O.L.S. Newman's posts, and the notes from his notes of survey of Marathon.

> I have the honor to be, Sir. Your obedient servant.

> > (Sgd.) T. J. PATTEN, Ontario Land Surveyor.

The Honorable.

The Minister of Lands, Forests and Mines. Toronto.

(Appendix No. 40.)

PART OF THE TOWNSHIP OF COLEMAN, DISTRICT OF NIPISSING.

TORONTO, May 11th, 1907.

SIR,—I have the honor to submit the following report on that part of the township of Coleman surveyed by me under instructions from your department, dated the 16th day of March, 1907.

This area lies to the west of that portion surveyed by Ontario Land Surveyor W. J. Blair in 1905, and is bounded on the west by the Montreal River and the old Gillies timber limit line run by Ontario Land Surveyor J: F. Whitson in 1903, and on the south by the Gillies timber limit line run by Provincial Land Surveyor William Bell in 1877.

I proceeded to the work on the 20th day of March and after the preliminary work of getting camp in order and taking an observation on polaris for meridian commenced the survey by running due west from the cedar post planted by Ontario Land Surveyor W. J. Blair at the southwest angle of lot 18, in the 6th concession, using this line as a base to run the various side lines north and south therefrom and in like manner using the side line between lots twenty-two and twenty-three as a base to run the various concession lines east and west therefrom to the waters of Bay Lake and the limit line or the mining location boundaries respectively.

Wooden posts were planted at the proper lot angles, and the distances and bearing to the various bearing trees earefully noted. Iron posts one and seven-eighths inches in diameter were planted beside the wooden posts and marked at the following points:—

1st. At the intersection of the north boundary of the township with the west shore of Bay Lake, marked "Coleman" on the southeast side.

2nd. At the intersection of the south boundary of the township with the west shore of Bay Lake, marked "Coleman, Con. I." on the north side, "XIX" on the west side.

"XIX." on the west side.

3rd. At the southwest angle of the township, marked "Coleman" on the northeast side, "Con. A." on the north side, "XXII." on the east side.

4th At the intersection of the north limit of the township with the east shore of Trout Lake, marked "Coleman" on the southeast side.

That portion of the township to the north of Montreal river and Portage bay is well timbered with banksian, white and red pine, birch, spruce and poplar, varying in size from twelve inches in diameter down. Lot twenty-two, concession "A" is well timbered with birch, cedar, spruce and pine from twenty inches in diameter down. The balance of the township is covered with second growth pine, birch, poplar and spruce from two to six inches in diameter.

Owing to the activity in mining development in that section of the country several mining camps and other buildings were noted. These may be described as follows:—

1st. On the north part of lot twenty, concession six, and east of McLaren lake, three new buildings were in the course of erection by the Cobalt Consolidated Mining Company.

2nd. On the southerly point of lot twenty-two, concession five, at the entrance to Portage bay, is situated an old Hudson Bay Company's trading post consisting of three buildings.

3rd. On lot twenty-four, concession five, north shore of Montreal river, one Thomas O'Neil has about three acres chopped and a small cabin erected.

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4th. On lot twenty-six, concession five, there is a small unoccupied house and about ten acres chopped and partially burnt over, on the north side of the Montreal river.

5th. On lot twenty-six, concession six, at the foot of Pork Rapids, on the Montreal river, William Morrison has erected a store and dwelling house, and C. H. Burk a dwelling house.

6th. On the north part of lot twenty, concession one, and close to Bay lake, there is a small miner's hut, unoccupied.

7th. On lot twenty-two, concession two, one Timothy Crowley has built a mining camp and is doing development work. The buildings and improvements on the mining location within the limits of the township were not noted.

Accompanying this report are plan and field notes of the survey.

I have the honor to be, Sir, Your obedient servant,

(Sgd.) L. V. Rorke,

Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 41.)

TOWNSHIP OF GLACKMEYER, DISTRICT OF NIPISSING.

ALVINSTON, Ont., December 12th, 1907.

Sir,—I have the honor to submit the following report of the survey of the township of Glackmeyer, in the District of Nipissing, on the Abitibi river, made under instructions dated May 6th, 1907, to survey the same into lots of 150 acres each.

I left Alvinston July 9th, and after arranging for supplies, canoes, men. etc., I proceeded from McDougall's Falls down Black river and Abitibi river to the Buck Deer Rapids, where Thomas Fletcher and myself were unfortunately capsized and he drowned. After searching for his body and arranging for further search our party proceeded on the way down and com-

menced the survey much disheartened.

Commencing at the ninth mile post planted by Ontario Land Surveyor T. B. Speight, on the base line run east astronomically from the one hundred and sixty-second mile post on the Algoma-Nipissing boundary, I ran north astronomically by turning off the proper angle and at the Abitibi river obtained an observation by polaris and found the line correct. I ran north nine miles from the base line and turned west and ran nine miles to the district boundary and struck this line eight links south of the one hundred and seventy-first mile post planted on the boundary by A. Niven, Ontario Land Surveyor.

During the progress of the above survey of the boundaries I laid off the lots in the usual way and proceeded with the survey as shown on the plan.

Owing to the continued rainy and cloudy weather it was sometimes very difficult to obtain observations, but a sufficient number were made, as shown in the field notes,

The survey was made with transit and the lines have been well opened out and attention was paid to planting durable posts, and in only a few cases were posts other than spruce, cedar or tamarac used. They were marked with a scribe and well driven in.

The following iron posts were planted in Glackmeyer, one and seven-eighths inch iron post at the northeast angle, marked on the north, south, east and west sides with the letter "R"; on the south "Con. XII."; on the west "Lot I." One and seven-eighths inches iron post at the northwest angle marked on the north, south, east and west sides "R"; on the south "Con. XII."; on the east, "Lot XXVIII.," and on the southeast "Glackmeyer."

One and one-quarter inch iron post at the intersection of the centre lines of the east boundary and the road allowance between the sixth and seventh concessions, marked on the north, south, east and west sides "R"; on the north, "Con. VII."; on the south, "Con. VI."; on the east "Lot I."

One and one-quarter inch iron post at the intersection of the centre of the road allowances between concessions six and seven, and lots twelve and thirteen, marked on the north, south, east and west sides "R"; on the north "Con. VII."; on the south "Con. VI."; on the east "Lot XII."; on the west "Lot XIII."

One and one-quarter inch iron post at the intersection of the centre of the road allowance between concessions six and seven, and the west boundary marked on the north, south, east and west sides "R"; on the north "Con. VII."; on the south "Con. VI."; on the west "Lot XXVIII."

One and one-quarter inch iron post at the intersection of the centre of the road allowance between lots twelve and thirteen, and the south boundary marked on the north, south, east and west sides "R"; on the north "Con. I."; on the east "Lot XII."; on the west "Lot XIII."

One and one-quarter inch iron post at the intersection of the centre of of the road allowance between lots twelve and thirteen, and the south boundary marked on the north, south, east and west sides "R"; on the south "Con. XII."; on the east "Lot XII."; on the west "Lot XIII."

The one and seven-eighths inch iron post found at the southwest angle was marked, additionally on the northeast side "Glackmeyer"; on the north "Con. I."; on the east "Lot XXVIII."

The one and seven-eighths inch iron post found at the southeast angle was marked on the northwest "Glackmeyer"; on the west "Lot I"; on the north "Con. I."

GENERAL FEATURES.

The township is generally level or gently undulating and fairly dry with portions east of the Abitibi river and along the north boundary somewhat higher than in the body of the township west of the river.

Two lakes occur and a few large ponds. The Abitibi river flows through

the eastern portion of the township.

The land can be easily drained, for the general fall is good, and the presence of small gullies, and two fairly large creeks, will afford a good outlet.

The land is covered with a heavy moss at present, which when cleared

off, will leave the land much drier, naturally than it is to-day.

There is a very little muskeg, and nearly ninety per cent. of the town-ship will be good agricultural land.

A glance at the timber map will give a good idea of the elevation of the land in general, the higher land having the heavier timber.

The muskegs are not deep and are underlaid at a depth of eighteen or

twenty-four inches with a clay subsoil.

Soil.

In general the soil consists of a clay covered with a loam, say from four to ten inches, or in the lower ground with a muck from six to twelve inches.

This clay contains a slight admixture of sand which will render it easily workable, though there does not appear to be as much sandy admixture as in the townships to the west and to the south of Glackmeyer.

TIMBER.

The township is timbered with a growth of spruce, dead tamarac, poplar, birch, balsam, with a few balm of Gilead, and in places some cedar. Alders

grow everywhere.

It is generally mixed. The sizes run, in the southern portion four inches to seven inches average, in the central portion west of the Abitibi river, from four inches to eighteen inches, while along the east and north boundaries the sizes run from four inches to twenty-four inches.

The tamarac, though killed some time ago by the insect pest which passed over this country some years ago, is still sound and will make good

railway ties.

The general timber is large enough for building purposes, and the runs of spruce in this township will be valuable for pulpwood.

MINERAL.

There are only one or two exposures of rock in this township, and these are of a Huronian origin, and of a grey slaty nature. In lots twenty-four and twenty-five in concession ten a few granitic stones are to be found, but no minerals were noticed during the survey.

WATERS.

The Abitibi river flows through the eastern portion of the township and is about five or six chains wide. The current is good probably on account of being only a few miles above the Long Sault.

A small rapid occurs on lot three and four in the sixth concession with a fall of about three feet in fifteen chains, but it cannot be considered a water power, though a dam might develop enough power for a small mill.

The water in the Abitibi is impregnated with the clay from the lands

through which it passes.

Two lakes occur and a number of large ponds (generally in muskeg). Two large creeks drain the land west of the river.

FISH AND GAME.

Game is scarce in this township, owing, no doubt, to work going on on the Transcontinental Railway. A few signs of moose and bear were seen but the smaller game with the exception perhaps of beaver has been pretty well exhausted by the Indians. Maskinonge may be caught in the river with the net, and in the lakes

large pike and pickerel may be caught with the troll.

Variation of the Magnetic Needle.—The Magnetic Variation is fairly constant and is about eight and two-thirds degrees west, though in places this varies slightly.

I submit with this report field notes and traverse notes, a general plan

and a timber map.

I have the honor to be,
Sir,
Your obedient servant,
(Sgd.) A. S. Code,
Ontario Land Suveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto, Ontario.

(Appendix No. 42.)

TOWNSHIP OF HANNA, DISTRICT OF NIPISSING.

LISTOWEL, Ontario, December 11th, 1907.

SIR,—In pursuance with instructions dated May 6th, 1907, from the Honorable the Minister of Lands, Forests and Mines, I beg leave to report the following: I had the same difficulty in securing suitable canoes for my trip this year. I had canoes ordered from the Peterborough firm, and just when ready to start for my work, I received word that my canoes could not be shipped. However, I was fortunate in getting canoes in Orillia and North Bay after a delay of two weeks. I left Toronto on June 25th, and reached Englehart on the Temiskaming and Northern Ontario Railway, on June 27th. This point is one hundred and thirty-eight miles north of North Bay, and was at that time as far north as the regular trains were running. From Englehart, we travelled north on the construction train to McDougall's Chute, a distance of sixty-five miles. The steel on the railway was laid to this point on July 2nd. McDougall's Chute is situated on the Black river. We left McDougall's Chute on July 2nd, with seven canoes, fourteen men, camp outfit and provisions, and got as far as the junction of the Black and Abitibi rivers that night, a distance of fourteen miles; the next day we travelled down the Abitibi river to the boundary line between the townships of Pyne and St. John, on line between concessions two and three, a distance of 19 miles. In this distance there are three small portages, one at Iroquois Falls about five miles below the Black river, and the other two at the Buck Deer Rapids, ten miles below the falls. At these rapids we took our canoes down with a light load and portaged the rest of our out-This rapid is not a bad one to run, but one has to be careful. We ran down on the left side for the upper part of the rapid, and took the right side for the lower part.

The current in the Black river is very slow, but in the Abitibi it is rapid. The water in both these streams was very high, as the season was a

late one.

From this point on the Abitibi river I proceeded west along the line between concessions two and three in St. John township to the east boundary of the township of Hanna, a distance of six miles, It rained nearly every day on our way in to the work, so that we made very slow progress. I commenced on July 17th, the survey of the township of Hanna, at the southeast angle, running north from Ontario Land Surveyor, W. Galbraith's base line, and west from the west boundary of the township of St. John. During the survey of this township the weather was decidedly wet, the prevailing winds being southwesterly. I may say that I read the Act for the Preservation of forests against fire once, but had no occasion to read it again.

The iron post furnished me by your Department, I planted and marked

as follows:

The iron post one and one-quarter inches in diameter and three feet long, planted alongside a wooden post, on the east boundary of the township between concessions three and four is marked "Con. III." on the south side, "Con. IV." on the north side, and "I." on the west side. The wooden post is similarly marked.

The iron post one and one-quarter inches in diameter planted alongside a wooden post, on the south boundary of the township, on the side line between lots six and seven, is marked, "Con. I." on the north side, "VI." on the east side, and "VII." on the west side. The wooden post is similarly

marked.

The iron post one and a quarter inches in diameter planted alongside a wooden post, on the north boundary, where the side line between lots 6 and 7 intersects it, is marked "Con. VI." on the south side, "VI." on the east side, and "VII." on the west side. The wooden post is similarly marked:

The iron post one and one-quarter inches in diameter, planted alongside a wooden post, on the west boundary, between concessions three and four is marked, "Con. II." on the south side, "Con. IV," on the north, and "XII."

on the east side. The wooden post is similarly marked.

The iron post one and one-quarter inches in diameter planted alongside a wooden post, at the centre of the township where the side line between lots 6 and 7 intersects the line between concessions three and four, is marked, "Con. III." on the south side, "Con. IV." on the north side, "VI." on the east side, and "VII." on the west side. The wooden post is similarly marked.

The iron post one and seven-eighths inches in diameter, planted alongside a wooden post, at the northeast angle of the township is marked "Con. VI." on the south side, "St. John" on the southeast, "Hanna" on the southwest, "XII." on the east side, and "I." on the west side. The wooden

post is similarly marked.

The iron post one and seven-eighths inches in diameter planted alongside a wooden post at the southeast angle of the township is marked "Con. I." on the north side, "XII." on the east side, "I." on the west side, "St. John" on the northeast, and "Hanna" on the northwest side. The wooden

post is similarly marked.

The iron post one and seven-eighths inches in diameter, planted alongside a wooden post at the southwest angle of the township is marked "Con. I." on the north side, "XII." on the east and "I." on the west, "Hanna" on the northeast, and "Reaume" on the northwest. This post is also marked "C.L.M." and is on the boundary line between the districts of Nipissing and Algoma. The wooden post is similarly marked.

The iron post one and seven-eighths inches in diameter, planted alongside a wooden post at the northwest angle of the township is marked "Con. VI." on the south side, "XII." on the east side, "Hanna" on the southeast side, and "Lamarche" on the northeast side. The wooden post is similarly marked. This post is also marked "C.L.V.I.M.," and is on the boundary line between the districts of Algoma and Nipissing.

Under the head of timber I beg leave to report the following:

The kinds of timber found in this township are, in order to their relative abundance, spruce, poplar, tamarac, white birch, balsam, balm of Gilead, white spruce and cedar. The only place where I found white spruce and cedar was along the rivers and lakes and small streams. The underbrush consists of moose, male, alder, hardhack, cedar and mountain ash, the black spruce is the prevailing timber in this township, and the largest is found along the rivers and lakes, and is consequently scattered, small spruce and tamarac are the only kinds of timber found in the muskegs. There is also a large quantity of poplar and white birch in this township, and is found on higher land. The best of it being scattered, but it is all of sufficient size for pulpwood, and the largest is suitable for lumber. The tamarac is the same as I found last season, being all half dead or dead. The reason of its dying, I learned from an old timer of the country, who says that the result was caused by a small insect. The balsam is nearly all of small dimensions, the largest of it being found along the lakes and rivers. With regard to cedar and white spruce, I beg to say that the best is found along the rivers and lakes, but there is only a small quantity of it in the township. largest and best timber is found along the banks of the Frederick House river, and is composed of all kinds, and I would recommend that one mile back, from each side of the river for the whole length of the township, be reserved for lumbering.

There are no rapids or water-falls on the river in this township. The current will average from $1\frac{1}{2}$ to 2 miles per hour.

The water in the river remained at about the same level until the first week in October. The banks of the river are, for the most part, low, and there are no high cut banks in this township.

We saw considerable game, principally moose, also numerous partridge, but no rabbits. We fished in all the small lakes with troll, and hook and line, and caught considerable pike in Warrick Lake.

Under the head of "Soil," I beg leave to report that I found it to be clay and clay loam. In the lower level there is a heavy growth of moss, then from 4 inches to 18 inches of black muck and then the clay. This black muck holds the water. All the water in this township is good. Clay loam was found on the higher land where there was very little moss. In the muskegs where the timber is small, I found a thin layer of moss, then a few inches of muck and then the clay. The muskegs have all clay bottoms. The land in this part of the Province can be easily cleared, as the roots of the trees do not penetrate the clay, but seem to run along between the clay and the muck, and when the land becomes burnt over and drained the stumps can easily be moved. The country, although flat and level, can easily be drained, as the river and stream beds are sufficiently low to afford good drainage. The land along the banks of the river is rolling in places, but for the most part is level.

Under the head of "Minerals," I beg to report that I found no outcropping of rock, nor any stony land or boulders, and consequently found no trace of minerals.

The magnetic variation of the compass was very irregular, changing two degrees some places in a distance of ten chains. I found the average variation to be 8 degrees west.

The wet weather greatly impeded our work. One week we were in camp five days. In the month of July, rain fell 24 days. In the month of August, rain fell on 25 days. In the month of September, rain fell on 20 days. Snow fell on two days. In October, up to the 10th, rain and snow fell on 7 days. We had frost at McDougall's Chute on July 2nd. The next frost was on August 26th.

With regard to the opening up and development of this township, I would say that the Temiskaming and Northern Ontario Railway location runs north through the township of St. John, and the Grand Trunk Pacific location runs east and west through the township to the north, so that this part will be within a few miles of the junction of the two, and when these lines are built the land will be easy of access, and should become settled within the next few years.

Respectfully submitted by (Sgd.) E. D. Bolton,
Ontario Land Surveyor.

The Honorable,
The Minister of Lands, Forests and Mines,
Toronto.

(Appendix No. 43.)

TOWNSHIP OF KENNEDY, DISTRICT OF NIPISSING.

TORONTO, Ontario, December 21st, 1907.

SIR,—I have surveyed the township of Kennedy, in the district of Nipissing, according to instructions dated May 15, 1907, and beg to report as follows:—

I arrived at the township on August 1st, and owing to the incessant rain and cloudy skies I was unable to obtain astronomic observation of any description until August 22nd. Accordingly, I ran the line between concessions two and three, the line between concessions four and five, and the line between concessions six and seven, also the side lines up to concession five by turning angles from Ontario Land Surveyor Speight's base and meridian lines. On August twenty-second, I succeeded in obtaining an observation on side line between lots eleven and twelve. On August twenty-sixth, and September sixth, I took observations on the east boundary. From this time on, I used these lines as bases, turning angles from them. In running the north boundary I was only able to get one observation on September seventeenth. On the whole, I found it very difficult to do accurate work on account of the rain which fell on an average of five days a week.

This township is surveyed on the new method of survey approved by Order-in-Council, dated April twenty-fourth, nineteen hundred and six. It consists of twelve concessions, each of which has a depth of approximately fifty-nine chains, fifty links. In each concession, there are twenty-eight lots. Lot number one at the eastern end of concessions is a narrow lot, and lot number twenty-eight is a wide lot. All other lots being twenty-five chains, twenty-five links in width, except adjoining side roads as shown on plan. The lines are run in the centres of the road allowance between every second concession and between every sixth and seventh lots. At the front angles of the lots, at right angles from the centre line of the concession.

road allowance posts (mostly of spruce) were planted fifty links on each side, north and south of the centre line of the concession road allowance. The lot numbers are marked on the east and west sides of the posts. The concession numbers are marked on the side of the posts facing the concessions, while on the other side, facing the road allowance, the letter "R" is marked. Posts are also planted on the centre lines marked on the east and west sides with the lot numbers, and on the north and south sides with the letter "R."

At the intersection of the centre lines of the different concession road allowances with the centre line of the side road allowances posts are planted, marked "R" on all four sides, also posts are planted at the four lot corners formed by the intersection of the road allowances. These posts are marked "R" on the two sides facing the road allowance, having the lot numbers on the side facing the lots and the concession numbers on the sides facing the concessions. Nearly all the posts planted are four inch square spruce posts. Those at the end of the concessions are five inches square, and those at the

corners of the township are six inches square.

I planted an iron post one and one-quarter inch in diameter at the intersection of the south boundary with the centre line of road allowance between lots numbers twelve and thirteen, marked "Con. I., Kennedy" on the north side, "Lot 13" on the west side, "12" on east side, and "R" on south side, also planted an iron post one and one-quarter inch in diameter at the intersection of road allowance between concessions six and seven with the east boundary, marked "Kennedy" on west side, "Con. VI." on south side, "Con. VII." on north side, "R" on four sides, also a similar post at the intersection of this line with the west boundary marked "VI." on south side, "VII." on north side, "Kennedy" on east side. I also planted an iron post one and one-quarter inch in diameter at the intersection of the centre lines of the concession road allowance between concessions six and seven and the side road allowance between lots numbers twelve and thirteen, marked six on south side, seven on north side, twelve on east side and thirteen on west On the north boundary, at its intersection with the east boundary, side. I planted an iron post, one and seven-eighths inch in diameter, marked "Kennedy" on the southwest side and "R" on north, south, east and west sides, also a similar post at its intersection with the west boundary marked "R" on east, west, north and south sides, and "Kennedy" on southeast side. Where the north boundary is intersected by the centre line of road allowance between lots numbers twelve and thirteen I planted an iron post one and one-fourth inch in diameter marked "Kennedy" on south side, "12" on east side, "13" on west side. I marked the word "Kennedy" on the northeast side of the one and seven-eighth inch iron post planted by Ontario Land Surveyor Speight and marked "IX. Miles" which marks the southwest corner of Kennedy township. I also marked "Kennedy" on the northwest side of the one and seven-eighth inch iron post, planted by Ontario Land Surveyor Speight, marked "XVIII. Miles," which marks the southeast corner of Kennedy township.

I made a traverse survey (by stadia) of the Abitibi river, a plan of which accompanies my field notes.

TIMBER.

The greater part of the township is timbered with small spruce averaging from four to eight inches in diameter. On the higher land, there are about equal quantities of spruce, white birch, poplar and balsam, averaging from four to fourteen inches in diameter.

Soil.

The soil is chiefly a light colored solid clay, which is almost entirely covered by moss varying from six inches in depth on the high land, to unknown depths in the muskeg, the greater part averaging two feet in depth. On some of the ridges the clay is covered by a layer of loam from six to twelve inches in depth. While I was in the township the land was very wet, but on two or three occasions when the rain stopped for a few days the water lowered so rapidly that I was led to believe that in an ordinarily dry season the land would be fairly dry with few swamps. There are ridges of high land along each side of the rivers running through the township. These rivers have many long shallow rapids, making them almost useless for canoeing purposes, even in high water. The lakes in the township were caused by beaver dams and are evidently shallow. The banks are low and swampy, making it difficult to determine high water mark with any degree of accuracy.

MINERALS.

I saw no signs of any economic minerals, the only rock visible being in the rapids of the rivers. There is also a small area of rock "graphite" covered by moss running across the east boundary on concession eight and across the line between concessions eight and nine in lot number one.

I have the honor to be,
Sir,
Your obedient servant,
(Sgd. A. F. Wells,
Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 44.)

Township of Bayly, District of Nipissing. Sault Ste. Marie, Ont., September 26th, 1907.

Sir,—I have the honor to submit the following report on the survey of the township of Bayly, in the District of Nipissing, performed under instruc-

tions from your Department, dated May 6th, 1907.

As instructed, I commenced the survey at the southeast angle of the township of Marter, and the southwest angle of the township of Bayly, from which point I chained north along the east boundary of Marter one mile, where I found a post marking the first and second concessions of that township, from which point after taking an observation of polaris, I ran east astronomically six miles, giving the lots a uniform width of forty chains, I also chained the north boundary of Ingram, which I found correct except lot 12. I found a $1\frac{7}{8}$ inch iron post at the northeast angle of Ingram and the northwest angle of Pense, I then ran alternate side lines, as well as the east boundary, north astronomically from the proper points, laying off the various concession lines as instructed.

As I found a good wagon road running north and south at the south-west corner of the township, I planted a $1\frac{7}{8}$ inch iron post 50 links east and 50 links north of the true southwest angle of the township, marked on the northeast "Bayly," on the east "No. 1," on the north "Con. 1." I planted

a 1½ inch iron post on the west boundary at the line between concessions three and four, marked on the east side "Bayly, Lot I.," on the north side "Con. VI.," on the west side "Marter," and on the south side "Con. III." At the northwest angle I found a 1½ inch iron post marked on the northwest "Catharine," on the southwest "Marter, Co. VI.," on the west "No. I." I marked on the southeast "Bayly," on the south "Con. IV.," on the east lot I at which point took an observation of polaris and ran the north boundary east astronomically six miles, planting wooden posts at each mile, marked in accordance with instructions, and a 1½ inch iron post with wooden post between lots 6 and 7, both marked on the south "Bayly Con. VI.," on the east "Lot 7," on the north "Skead," on the west "Lot 6."

At the northeast angle of the township I planted a 1% inch iron post with a wooden post, both marked on the southwest "Bayly," on the south "Con. VI.," on the southeast "Mulligan," on the east "No. 1," on the north-

east "Rattray," on the northwest "Skead."

Iron posts one and one-quarter inches in diameter and three feet long were also planted as follows:—One at the intersection of side lines 6 and 7 with the south boundary, marked "Bayly, Con. I." on the north side; "Lot VI." on the west side, and "Lot VII." on the east side; one at the intersection of side line VI. and VII with concession line III and IV. marked "Con. IV." on the north side, "Con. III." on the south, "Lot VI." on the west, and "Lot 7" on the east side; one at the intersection of side line VI. and VII. with the north boundary, marked "Con. VI." on the south side, "Lot VI." on the west and "Lot VII." on the east side; one at the intersection of concession line III. and IV. with the west boundary, marked on the north side "Con. IV." on the south side "Con. III.," on the west "Marter," on the east Bayly Lot I. One at the intersection of con. line III. and IV. with the east boundary, marked on the north side "Con. IV.," on the south side "Con. III.," on the west "Bayly Lot XII." In all cases a wooden post was planted alongside of the iron post and marked the same as the iron posts. The other posts of the township are of wood and marked as shewn on the field notes.

The township of Bayly is generally rough and rocky, with a few small tracts of good clay land along part of the south boundary and a few small tracts of sandy loam soil along con. line V. and VI., and, on the whole, offers little inducement for settlers for agricultural purposes.

The township is well watered by numerous lakes and streams.

The rock exposures are of Huronian formation, schist, slate and shale, while occasional outcrops of granalite as distinguished from granite. I found no valuable mineral.

GAME.

I found moose in great numbers, but no trace of red deer or caribou. Fish, pike and pickerel.

I found no settlers but did find a few small clearings on the clay belt along part of the south boundary.

I have the honor to be,
Sir,
Your obedient servant,
(Sgd.) Thos. Byrne,

Ontario Land Surveyor.

The Honorable.

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 45.)

Township of Purvis, District of Nipissing.

LITTLE CURRENT, Ontario, October 23rd, 1907.

SIR,—I have the honor to submit to you the following report of the township of Purvis, in the district of Nipissing, in accordance with instructions from your Department, dated June 14th, 1907.

After completing the survey of the township of Bowyer this season, the account of my trip into the country will be found in my report of that township. I commenced the survey of Purvis at the iron post, one and seven-eighths inches in diameter beside the wooden one which I had planted at the northeast angle of Bowyer, and ran the north boundary east astronomically a total distance of four hundred and eighty chains and twenty-four links.

From the northeast angle of Purvis, I ran the east boundary, south astronomically three hundred and twenty-six chains and eighty-four links to the north shore of Lake Abitibi.

Regular lots were laid out forty chains in width and eighty chains in

depth, or thereabouts, throughout the township.

Wooden posts, six inches in diameter, sometimes larger and in some cases where the timber was small a little smaller, were planted at the lot corners with the lot numbers plainly cut on them. Two bearing trees were marked at each corner, and the bearing and distance from the corner post entered in the field notes.

At the northwest angle as already mentioned, an iron post, one and seven-eighths inches in diameter, had been planted to mark the northeast angle of Bowyer, the name "Purvis," and lot numbers were cut on it, also on the wooden one. At the northeast angle a similar post was planted beside the wooden one, and similarly marked.

Iron posts one and one-fourth inches in diameter with the lot numbers cut thereon, were planted beside the wooden ones at the intersection of the line between lots six and seven, with the north boundary, and also where it intersects the line between concessions three and four, also where the line between concessions three and four intersects the east boundary. Where this concession line intersects the west boundary one had already been planted

in the survey of Bowyer.

No iron post was planted where the west boundary intersects Abitibi Lake, where the east boundary intersects the lake there was also no iron post planted, but a cairn of boulders five feet at the base and thirty inches high was built around a tamarac post seven inches in diameter with the name "Purvis" and the lot numbers cut thereon. Iron posts were marked similar to wooden ones, that is the lot and concession numbers were cut on them. Those at township corners have the name of the township cut on the side facing the township.

Finding during the progress of the survey, that the number of iron posts required was short, I reserved a sufficient number for the base line. Just how the number came to be short it is hard to say. I found after some delay and trouble, that the iron posts sent to New Liskeard for me last June, had been delivered to a hardware merchant in that town, and possibly they were

not all recovered.

Special attention was given to the correct marking of the one-half mile posts on the concession line.

All lines were well cut out and blazed. A six inch Burt's solar compass was used to find the meridian.

The magnetic variation was nine degrees, forty-five minutes, west and fairly steady.

The concession lines of Bowyer are produced into Purvis without any jog.

The timber consists of black spruce, poplar, jack pine, balsam, birch and balm of Gilead. Some cedar and ash was found along the shores of Abitibi Lake. A few white spruce were seen. The black spruce is found up to about thirteen inches, the poplar to about twenty inches. Jack pine to fifteen inches and balsam and birch to about twelve inches. There is considerable amount of dry tamarac, some of which is large enough for railroad ties.

The soil is principally clay, and nearly all fit for farming. There is sand and gravel on some of the hills, on a belt about a mile to one and one-half miles wide, which extends from the most southerly point of lot four, concession one, northerly to the south limit of lot five, in concession four, at the east bank of the Kaminisinokwa River. It is also found on the east boundary in concession five and six, also on the north boundary on lot nine along Joe's Creek. The only rock exposures are along Abitibi Lake from lot one to lot five.

Some muskeg was found on the line between concessions four and five, lots one, two, three and four. There is also some on lots four and five on the north boundary. The head of the bay, lots nine and ten, concession four, is also low lying country. The remainder of the township is fairly dry and level. Concessions one and two, on the point in the southeast are somewhat rolling. It will no doubt be a desirable township for settlers owing to its proximity to the railway, and Lake Abitibi.

The rainfall this season was excessive. There was more or less rain nearly every day, and one or more days in the week it rained hard enough to compel us to quit work.

A good pack trail was cut from the east bank of the Kaminisinokwa River, at the line between concessions three and four northeasterly to the line between lots four and five. Then along that line to about ten chains from the north boundary, then northeasterly to the north boundary and following it to the northeast angle.

The survey lines of the Transcontinental Railway were intersected in a great many places. I found from the engineers that the line will probably be located where I have shewn it on the plan.

On lot seven, concession three, on the north shore of Abitibi Lake, the Transcontinental Railway Survey has erected a log dwelling and storehouse. Mr. Quillish, the caretaker very kindly watched our supplies which we left there all season in a tent.

An Indian named Louis McDougall has built two dwellings and a stable on the shore of the lake on lot two, concession one. He has also a small clearing with a few potatoes.

The Kaminisinokwa River is navigable for canoes only to the line between

concessions three and four.

Joe's Creek is navigable for canoes from its confluence with the Circle River, about half a mile north of the township to near its intersection with the north boundary in lot seven.

The stream emptying into Lake Abitibi in lot eight, concession four, is navigable for canoes to near the line between concessions four and five.

Accompanying this report I have forwarded plan, field notes, timber plan, account, etc.

The measurements in the traverse of the waters were made with a Stadia.

I have the honor to be,

Your obedient servant,

(Sgd.) T. J. PATTEN.

Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 46.)

TOWN PLOT OF SMYTH, DISTRICT OF NIPISSING.

New Liskeard, Ontario, December 2nd, 1907.

SIR,—I beg to report the following classification of lots as surveyed by me in the town plot of Smyth, district of Nipissing, as requested by your department on November 28th, 1907.

Class No. 1. Lots 83, 84 and 85. Class No. 1. A. Lots No. 16, 17, 86-93 inclusive, 96, 98, 105 and 106. Class No. 2. Lots A.B. 8, 9, 18, 25, 26, 41, 42, 57, 58, 72, 73,, 94, 95,

121, 122, 140 and 141.

Class No. 3. Lots No. C. D. E. 1-7 inclusive, 10-15 inclusive, 19inclusive, 27-40 inclusive, 43-56 inclusive, 59-65 inclusive, 68-72 inclusive, 74, 75, 76, 78, 79, 80, 81, 99-104 inclusive, 107-120 inclusive, 123-139 inclusive, 142-150 inclusive. Class No. 3. A. Lots No. 66, 67, 77, 82.

I have the honor to be,

Sir,

Your obedient servant. (Sgd.) JAMES H. SMITH,

Ontario Land Surveyor.

The Honorable,

The Minister of Lands, Forests and Mines, Toronto, Ontario.

(Appendix No. 47.)

Town Plot of Smyth, District of Nipissing.

New Liskeard, Ontario, December 2nd, 1907.

SIR, In accordance with instructions received from your department dated October 21st, 1907, to subdivide part of broken lot six in the fifth concession of the township of James in the Temagami Forest Reserve, in the district of Nipissing, into town lots, I beg to report as follows:

On the 26th of October, 1907, I hired two experienced axemen, one chainman, and one assistant, purchased axes and other necessaries, and on Sunday evening at 7:30, we left for Latchford by the Temiskaming Northern

Ontario Railway, where we remained all night, and took the early boat on Monday morning up Bay Lake which connects with other boats up the Montreal River by which we arrived at Smyth town plot in the evening.

The survey was commenced the following morning by first locating the line between lots 5 and 6, concession 4, township of James. This was done by retracing the line between lots 4 and 5, concession 4, and running the line parallel to a line joining the limits of said line between lots 4 and 5 from a post planted by Ontario Land Surveyor, Alexander Baird in 1903, on the concession line between concessions 3 and 4, for lots 5 and 6, to its intersection with the southerly shore of Elk Lake (Montreal River), from which point a traverse was then run northwesterly along the southerly shore of Elk Lake to the probable westerly limit of the town plot.

The above mentioned work was then plotted, and a projected plan made of the subdivision by laying off lots at right angles in the general course to the lake front, as is shown on the finished plan, and leaving a road allow-

ance of one chain in perpendicular width along said lake.

The subdivision was then commenced, by first running and chaining the southerly limit of Second Street from the easterly limit of the lot to the westerly limit of the subdivision. The easterly limit of Spruce Street was then run at right angles to it northerly to the southerly shore of Elk Lake, and southerly to the northerly shore of Bear River. These lines were used as base lines from which all the remaining lines were run. The points of commencement of the remaining street lines were then laid off on the above mentioned base lines, and said lines were run and chained. All lines crossing Bear River were made continuous and parallel to each other. The chainages at the intersection of these lines with Bear River, Elk Lake, and the other subdivision limits were noted, and the above mentioned projected plan was completed, leaving a road allowance of one chain in perpendicular width along Bear river, and the lots numbered as shown on the completed plan.

The lots were then posted by chaining from the intersection of the above mentioned street lines, noting the chainage in width and length of all lots posted. The back lines of the lot were then run and posted as shown on the plan and field notes. The fronts of broken lots along Water Street, River

Street east, and River Street west, were then run and posted.

The posts along the street lines were all marked with a scribe or scribing iron showing the adjoining lot numbers and "R" on the side facing the Iron posts (tubes), one and one-fourth inches in diameter, and three feet long, forged at the top, and painted red, were similarly marked with a cold chisel and planted at the following points. At the northerly angle of lot "A" at the northeasterly and southeasterly angles of lot eight, at the southwesterly angle of lot one, at the northeasterly angle of lot sixteen, at the southeasterly angle of lot seventeen, at the southwesterly angle of lot thirty-four, at the southeasterly angle of lot forty-two, at the southeasterly angle of lot forty-eight, at the southwesterly angle of lot sixty-six, at the southeasterly angle of lot seventy-two, at the southeasterly angle of lot seventy-six, at the southerly angle of lot eighty-one, at the northwesterly and southwesterly angles of lot eighty-three, at the northeasterly and southeasterly engles of lot eighty-five, at the northeasterly angle of lot ninetysix, at the easterly angle of lot ninety-eight, at the westerly angle of lot ninety-nine at the southwesterly angle of lot ninety-three, at the northwesterly angle of lot one hundred and twenty-one, at the north and easterly angle of lot one hundred and thirteen, at the southwesterly angle of lot one hundred and thirty, at the southwesterly angle of lot one hundred and fortyone, and at the southeasterly angle of lot one hundred and fifty.

The wooden posts were all made of good cedar except a few which were pine, and were all from two to three inches square and two feet in length.

They were all driven into the ground, leaving about ten inches above the

surface.

The lines were all well cut out and blazed.

The survey which was connected to the westerly limit of the lot by retracing and chaining the said westerly limit from the southerly shore of Elk Lake, southerly to its intersection with the northerly shore of Bear River, and running and chaining a line to it from the southwesterly angle

of lot sixty-five as shown on the completed plan and field notes.

The chainages of the intersection of my lines with the easterly limit of the lot are noted in the field notes and on the plan. I endeavoured to observe from Azimuth but was unable to on account of the cloudy weather. The astronomic bearings were obtained from an observation taken in October, 1907, by J. H. Shaw, Ontario Land Surveyor, on the line between lots five and six, concession four, on the north side of Elk Lake.

The part west of Bear River is well timbered with spruce, poplar, birch, pine and a few cedar. The part on the east side of Bear River is

timbered similarly but it was mostly burnt over last year.

The land is fairly high and level and good drainage could be obtained from all parts of it There is practically no low land in the whole town plot.

Accompanying this report are two general plans and field notes of the

entire survey.

I have the honour to be,
Sir,
Your obedient servant,
(Sgd.) JAMES H. SMITH,
Ontario Land Surveyor.

The Honourable,

The Minister of Lands, Forests and Mines.

Toronto.

(Appendix No. 48.)

TOWNSHIP OF REDDITT, DISTRICT OF RAINY RIVER.

Kenora, 18th April, 1907.

SIR,—I have the honor to report that in accordance with your instructions, dated the sixth day of July, 1906, I have completed the survey and subdivision of the township of Redditt, in the District of Rainy River.

Leaving the town of Kenora, on the 10th day of August, 1906, I proceeded by wagon over the Melick and Jaffray road north to the Black Sturgeon Lake, thence by canoes easterly across the Lake to the mouth of Rice Creek following up this creek in a northeasterly direction and making two small portages, we arrived at Deacon Lake and made our first camp.

I commenced my survey at the southeast corner of the township, taking for my starting point the iron and wooden posts planted by O.L..S Deacon in the east boundary of Melick, near the shore of Deacon Lake, the northeast corner of Melick being in the water of Deacon Lake. After taking an observation, I ran the east boundary north astronomically to the fourth concession, I then opened up the north boundary of Melick, which is also

the south boundary of Redditt, and planted posts forty chains apart as far as lot thirteen of Melick, making careful notes of difference in chaining, if any, with that of Deacon's survey which is shown in field notes. I then ran the north and south lines between lots two and three, four and five, etc., and the west boundary north astronomically, taking observations as often as the weather permitted and correcting my bearings whenever any appreciable error was discovered; the details of these observations are entered in the field notes. The magnetic variation averaged about eight degrees, thirty minutes east, but varied between six degrees and ten degrees east, probably caused by decomposed iron pyrites in the granite.

I planted posts on the fronts of concessions and on the north boundary where these were intersected by the east and west boundaries and by the side lines between two and three, four and five, six and seven, etc., and also on the fronts of concessions at the corners between lots one and two, three and four, five and six, etc. These lots are marked with the number of the lots, and concessions which they are intended to govern, that is on the east and west side with the numbers of the adjoining lots and on the north side with the number of the concession of which they mark the front. The posts on the east and west boundaries, and on the lines between lots two and three, four and five, six and seven, etc., were marked on the south side also with the number of the concessions of which they mark the rear.

At the southeast, northeast, northwest and southwest corners of the township I planted, in addition to the wooden post, iron posts one and seven-eighths inches in diameter, that near the southeast corner being placed at the intersection of the north shore of Deacon Lake with the east boundary, the name of the township "Redditt" was cut on the side facing inwards in addition to the numbers of the lots and concessions with a cold chisel, also an iron post one and one-quarter inches in diameter in the centre of the township at the intersection of line between concessions three and four, and side lines between lots six and seven, and also on the south boundary between lots six and seven, and on the east boundary between concessions three and four, on the north boundary between lots six and seven and on the west boundary between concessions three and four. The general surface of the township is of a rolling rocky nature, with a few valleys running through it of good arable land showing a good growth of alders, willows and wild hay with scattered tamarac, suitable for wood and ties, and in some places the tamarac is long, large and straight and would make good piles; the first concession adjoining Melick is well timbered, with the exception of lots one, two and three, with mixed timber, jack pine, tamarac, spruce, balsam, poplar and white birch, and an odd red pine here and there.

The eastern portion of the township is practically all rocky rolling country, covered with a second growth of jack pine, poplar, and birch, with the exception of a patch around the intersection of the line between concessions three and four and the eastern boundary, which has missed the fire of ten or twelve years ago, and contains a few thousand ties and timber suitable for cordwood. There is no red or white pine to speak off, except a small grove of red pine on the eastern shore of Norway Lake on the north boundary, which contains approximately two hundred thousand feet, the trees running from nine to sixteen inches in diameter.

The western portion, and especially the northwestern, contains some good patches of land, well watered by lakes and streams, the soil being a rich dark clay loam with a clay subsoil which in patches is mixed with sand or sandy loam; there is excellent pasture all through this portion, the low

land being covered with wild hay and the high with a thick growth of wild pea 'vine that all stock thrive upon and prefer to any grass. There are a number of small lakes all through the township as the map shows, there being over thirty in all. Corn, Talbot and Kramer being the largest, in many of the lakes, especially Talbot, the water is very clear and pure, and no doubt pickerel, pike, and white fish will be found in them. Talbot and Beach Lakes have some lovely sand beaches, and are well suited for summer resort purposes.

Indications of moose, cariboo and red deer are abundant. This township lying between the valleys of the Black Sturgeon, and Black or McFarlane River (which is composed of a chain of lakes and connection streams), commencing at the Winnipeg River, and joined by a river which is navigable for canoes in high water with a few short portages to Bluff Lake, being the next lake northeasterly from Grindstone Lake, the water sheds both ways to the south into Black Sturgeon Lake, and to the north into the McFarlane River, through the valley of which the Transcontinental Railway runs, winding its way around the lakes to keep in the low-land of this valley.

The right of way is now all cut out through here and rock work and

grading is being pushed as fast as possible.

The principal route of transportation to this part of the Transcontinental from Kenora and Keewatin is via the Winnipeg River in summer, and via the Melick and Jaffray Colonization Road to all that part of the Transcontinental through Redditt and two miles west of Redditt, to the crossing of the Winnipeg River, and all contiguous parts east and west is from Keewatin across locations S. 406, Middle Lake S. 407, S. 408 and lot 5 in the fourth, fifth, and sixth concessions in Pellatt via Skiff Lake to Locke Bay, Winnipeg River, across the bay and thence to the crossing, and as a divisional point will probably be located in Redditt, the Colonization Road and its extension north to the Transcontinental will be of special importance as a connecting link and as a means of opening up all the arable land for colonization, already two squatters are located in the northwest part, close to the railway, namely, Adam Blondin on the south half of lot twelve, in the sixth concession, Paul Lavoie on the north half of lot twelve, in the fifth concession, and others are enquiring regarding the requirements and terms of settlement. The two settlers mentioned have each a small cabin built, and a couple of acres brushed and partly chopped round their cabins. On the north side of Corn Lake, in the sixth concession, while there are some large ranges of rock, there are several hundred acres of good land, and as it slopes to the south, the soil is warm and loose and should grow almost any kind of crop, and the new railway will furnish an excellent market. While the winters are long, the snow is seldom over two feet deep, this being an exceptional winter. From my observations and knowledge of the township of Melick, adjoining, which will practically be the same, the settlers are raising all kinds of vegetables, hay, oats, fall wheat, etc., successfully, and with the advent of competition of the new railway and a little more permanent road-making, every foot of arable land will be taken up in the near future.

I found no mineral of economical value, the rock over the whole town-

ship being granatiid gneiss.

The western portion of the township will average about fifty per cent. of good land, while the eastern portion will not exceed twenty five per cent. About the middle of the work, I was taken ill with congestion and had to quit work for two weeks, and about the 1st of November, I was attacked by

la grippe which delayed the work until I could not use canoes, nor walk on the ice, so I waited to traverse the lakes until the ice was well formed, and thick; some fairly good roads might be made by following the valleys; straight roads cannot be got.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) EDMUND SEAGER,

Ontario Land Surveyor.

The Honorable,
The Minister of Lands, Forests and Mines,
Toronto.

(Appendix No. 49.)

MORPETH P.O., January 11th, 1908.

To the Honourable the Minister of Lands, Forests and Mines.

SIR,—I have the honour to submit this my report, for the year 1908, as Ranger and Caretaker of the Rondeau Provincial Park.

There has been considerable work done on the Park this season, the chief of which was the building of the new stone crib dock, the repairing of the government road leading into the park, and the construction in part of a fine base-ball diamond. The work of levelling the ground for the diamond was begun rather late in the season, and the frost set in and prevented completion of the levelling until the ground thaws out again, then it is intended to cover the diamond with clay to a depth of 3 to 5 inches. A good base-ball ground will be a great acquisition to the park, as there are a number of good games played here during the season. The stone cribs and other timber portions of the new dock were about completed, but on account of the contractors, Messrs Blight & Fielder, not being able to make satisfactory arrangements to secure a dredge, the balance of the work was left undone but will be completed in the spring of 1908. I hope further use will be made of the dredge when here in cleaning out the unsightly rushes and weeds along the shore of the Park directly in front of the pavilion, the new refectory and the summer cottages.

I would again draw attention to the great lack of accommodation for the visiting public. Some definite steps should be taken at once to have a public house of some description built—club-house, hotel, boarding-house or some good respectable building that will accommodate from two to four hundred guests. The government road leading to the Park was repaired this fall and is being kept in excellent condition. To make one of the most beautiful drives in the Province and one which would also assist very materially in looking after and protecting the interests of the Park, this road should continue through the Park forest to the southern end and connect with the old lake shore drive-road at the bar. An estimate was forwarded to the Department recently showing the cost of enclosing 15 to 20 acres more of the bush land for the deer in captivity. All the shrubbery, weeds, etc., in fact everything but the natural grass (the red tops) and the trees, is killed in the old enclosure (14 acres) by the deer continually browsing them down. By picking up and burning the debris on the 14 acres, it would make a great addition to the picnic grounds, and the deer would be greatly benefitted by the green bushes and undergrowth in the new enclosure.

According to instructions from the Department, notice was given to the public that they would be allowed to take small pine poles, from three to five inches in diameter, from the Park forest for such purposes as curing tobacco, etc. I directed small trees to be taken only from where they were growing the thickest, using a thinning process, which leaves the bush in a better state of preservation. Some 797 poles were taken by 18 farmers at 10 cents per pole, amounting to \$70.70. They were allowed to take these poles during April and This privilege was very much appreciated. I was also instructed to allow a few poor families to take firewood from the tops of the trees that were cut and taken for timber for the new dock, and they were very thankful for the privilege. We are looking forward to having the new dock, base-ball grounds and other improvements completed and in good condition before the picnic season begins in 1908. The deer, game and fancy birds are looking fine and are in excellent condition. The attendance at the Park is increasing each year, and if the electric railway reaches here, as we expect it will in a short time, the number of visitors will increase more rapidly, hence the necessity for more and better accommodation.

I have the honour to be, Sir,

Your obedient servant,

ISAAC GARDINER.

APPENDIX No. 50.

ALGONQUIN PARK, January 15th, 1908.

To the Honourable the Minister of Lands, Forests and Mines:

Honourable Sir,—I beg to hand you a report on the Algonquin National Park for 1907. Our staff has consisted of fourteen men as follows: Superintendent, Chief Ranger and twelve rangers. These men have been in charge of seven sections, which they are supposed to patrol—two on each—and I feel confident they have done so to the best of their ability. There has, no doubt, been some poaching, it being utterly impossible for the number of men employed to travel as they should the area that necessarily falls to every two men. It would require, at least, a man to each township. I hope you will see your way clear to considerably increase the staff so that it may be impossible for poachers, with safety, to attempt trapping within the Park.

We have done a great deal of work during the past year in cleaning out portages, building and repairing shelter houses. Six new shelter houses have been built as follows: One on Tea lake, one on Maple lake, one on Nipissing, one on Otter slide, one at Opeongo and one at Orani's. These are all good buildings with cedar foundations, hewn logs and good floors, roofs, windows, etc. They are built 14 x 16 feet, or 16 x 18, inside.

We have had a great number of visitors in the Park during the past year, and I am pleased to be able to say there has not been a single complaint of any kind, the Park regulations having been strictly observed. The game in the Park is very noticeably on the increase, beaver and otter especially. These are in evidence wherever you turn. The deer are here simply in thousands, and can be seen in numbers wherever you go. They are becoming so tame, owing to the sense of security, that they scarcely move when you approach them.

Wolves, I regret to say, are also very much on the increase, and can be heard at night from headquarters howling all around. This I attribute largely to the increase of the deer in the Park, which, of course, is an inducement for the wolf to seek the same section. Every effort should be made to rid the woods of this pest that annually destroys more deer than the sportsman's rifle. This is putting it at a very low figure.

Fishing has been exceedingly good in the Park during the past year, and there is no reason to fear that the fish are on the decrease. Some large salmon trout have been caught, the largest measuring 37 inches and weighing 20 pounds.

Lumbering in the Park is being carried on very extensively, and a great number of men are employed in the woods. I feel that the staff have had the co-operation of the limit-holders to a greater extent each year, the lumbermen's instructions to each and every foreman being at once to discharge any man found breaking the law. Fires, I am glad to report, have done very little damage in the Park during the past year.

I would respectfully submit for your consideration the advisability of having the eastern boundary surveyed by a Provincial Land Surveyor and properly cut out. This has not been done since the new section has been added to the Park, and it is impossible for hunters to tell when they cross the line.

I am, Sir,

Yours respectfully,

G. W. BARTLETT.

Appendix No. 51.

List of persons holding Cullers' Licenses, issued under the Ontario Cullers Act, up to 31st December, 1907.

. Name.	P. O. Address.	Name.	P. O. Address.
Anderson, M. M	Almonte.	Baulke, George R	Aylmer, Que.
Allan, James D	Bracebridge.	Bouchey, Arthur	Massey.
Appleton, Erwin B	Bracebridge.	Buchanan, Mark	Trout Mills.
Albert, Andrew	Ottawa.	Barrett, W. J	Thessalon.
Adams, J. Q		Bromley, Thomas	
Anderson, Patrick J	Campbellford.	Bremner, John L	
Anderson, J. C	Gravenhurst.	Breen, Bernard	Garden River.
Allan, Alfred	Ottawa.	Buie, Dougal	
Allen, R. A	Bannockburn.	Baker, Thomas	
Aikens, Geo. M	Vetrine	Blais, Felix	
Appleby, Ridley		Balsdon, George	
Aylward, James	Potorborough	Bowers, Isaac	
Archibald, John L	Keewatin	Brown, Thomas	Rarrie
Austin, Wm. G.		Bass, Walter R	
Anderson, Charles	Little Current	Bates, Robert	
Anderson, John	Cartier.	Binnie, Thomas	Port Arthur.
Adair, Thomas Albert		Blair, William	Keewatin.
Anderson, J. G	Alpena, Mich.	Bick, Thomas	
Alexander, Samuel	Arden.	Burke, John Thomas	Midland.
Adams, Wm	Westmeath.	Buchan, Sterling	
Arkle, George	Kenora.	Brown, Joseph A	
Armstrong, Jas. Theodore		Baird, P. C	
Armstrong, Thos. J	Amprior.	Brill, J. W	
Acheson, Ira M	Westmeath.	Beattie, Arthur W	Arnprior.
Albert, Alfred E	Ottawa.	Brock, H. S.	Ottawa.
Alma, John E	Hawkesbury.	Benson, John Bird	
Adams, George A		Brennan, Richard Lawrence.	
Ansley, John Albert Ansley, John Jenkins	Thessalon.	Brown, Hugh Risside Bryan Frank	Koowatin
Ainslie, Alexander	Snanigh	Bennett, Edward Clinton	
Apleton, E. A	Kenora.	Blaine, Harvie Thomas	
Arnill, William	Iron Bridge.	Borrett, Thomas	
		Bickell, James Manuel	
Brophy, Michael Patrick	Massey Station.	Buisson, William	
Boland, Abraham	Cartier.	Borrett, James A	
Brown, Singleton		Bliss, C. Lidden	Sudbury.
Barry, Thomas James		Bray, James	
Blanchet, Paul Frederick		Bremner, Geo	Arnprior.
Bird, W. S	Parry Sound.	Bromley, Samuel	Pembroke.
Bayley, James T		Brown, A. C.	
Bell, Henry Beach, Herbert Mahlom	Ottowa.	Berlinquet, Julius	Harwood
Barry, Thomas		Burns, Clifton H	
Beatty W R	Parry Sound	Beaumont, Ernest	
Beatty, W. R	Mackay's Station	Beattie, Alex	
Brown, Robert D	Port Sidney.	Brennan, Reginald	Gravenhurst.
Breed, Arthur G	Penetang'ishene.	Boyd, Geo	Gravenhurst.
Barnes, Thomas George Lee	Muskoka Mille.	Bissell, Geo. Thomas	Trenton.
Buchanan, Robert	Coldwater.	Baxter, Richard	
Beck, Jacob Frederick	Penetang'ishene.	Breeaugh, Edward	Deseronto.
Bird, Joseph Manly	Muskoka Mills.	Boyd, Geo. A	Thessalon.
Boyd, John F	Thessalon.	Buchan, Frederick	Arnprior.
Brandin, Martin W	Peterborough.	Barrett, Patrick	
Bell, John C	Peterborough.	Brundage, Alfred W	
Bartlett, George W	warren	Brougham, Thomas	
Brown, Silas	MIOCK S MIIIB.	Blair, Robert IBenson, John W	Amprior.
Boland, W. G			Sturgoon Rose

Name.	P. O. Address.	Name.	P. O. Address.
Beck, Chas. M., Jr	Penetanguishene	Corigan, Robt. T	Emo.
Beatty, W. J	Coldwater.	Cameron, John H	Kenora.
Burnš, C. W., Jr	South River.	Carson, Melvin	
Bell, John Henry	Burk's Falls.	Cameron, John K	
Berry, Harold	Labelle, Q.	Cassidy, William	
Black, George	Barwick.	Coons, Geo. Washington	Peterboro.
Bettes, John Hiram	Muskoka Milis.	Chisholm, Geo. Leopold	Sault Ste. Marie
Brady, JohnBrown, James	Renfrew.	Clark, Wm. J Carr, Herbert E	
Brooks, W. J	Blind River.	Cochrane, Alfred L	
Bertrand, Allan	Nairn Centre.	Campbell, George	Fort Frances.
Brinkman, Alex. B	Sault Ste. Marie.	Chalmers, George James	Peterboro.
Black, Jacob	Barwick.	Caverly, David Charles	
Beattie, W. J	Arnprior.	Campbell, Archibald J	Little Current.
Bromley, William	Westmeath.	Close, John L	
Bissell, Harlie	Trenton.	Carmichael, Donald	
Brown, Robert	Starrat.	Carty, John	
Beaton, Hugh	waubausnene.	Cleary, Patrick M	
Bailey, Arthur Burd, James Henry	Parry Sound	Caldwell, Jas. M Cushing, John J	Davidson, One
Bailey, Samuel James	Orillia	Crebo, William	
Burton, Tinswood	Renfrew.	Cullen, Michael J	
Boyes, James	Huntsville.	Cuthbertson, William	Arnprior.
Brown, John	Rockdale.	Carss, Percy	Thessalon.
Brennan. Edward Scott	Sundridge.	Coghlan, Michael	Chapeau, Que.
Bell, John Arguey	Klock's Mills.	Cameron, Alexander Gordon	
Bromley, Edw. H	Pembroke.	Cassaday, W. W	Emo.
Bliss, Lawrence E		Carter, Robert EColeman, Jos	
Buee, Neil Brazziel, Leonard		Cardiff, George McDougall	Sudbury
Bowie, James	Bryson One.	Cameron, W. D	Kenora.
Barrie, Nicholas J	Ottawa.	Crandall, F	Port Arthur.
Burke, J. D		Campbell, James R	Eganville.
Bowen, Thomas		Campbell, John A	
Brown, James F	Baysville.	Caillier, Hyacinth	Amprior.
Blastorah, Bernard	Harwood.	Chamberlain, Thomas Cooper, David Allan	Millbrook.
Campbell, Robert John	Flinton.	Cox, Henry	Ballerica, Que.
Carpenter, John A	Arnprior.	Currie, James	Ottawa.
Campbell, Alex. J	Trenton.	Clarkson, A. E	Midiand.
Carson, Jámes	Procebridge.	Clairmont, ECameron, W. F	Sturgeon Ray
Campbell, Robert	Bracebridge.	Connolly, David	Gravenhurst.
Clairmont, Joseph	Campbellford.	Campbell, P. C	Sault Ste. Mari
Clarkson. Robert J	Parry Sound.	Cadenhead, Alexander	Midland.
Carruthers, Aaron	Hintonburg.	Carpenter, R. J	Arnprior.
Calder, Wm. J	. Burk Lake.	Christie, William Pringle	Severn Bridge.
Chew, Joseph	Gravenhurst.	Campbell, C. V	Sault Ste. Mari
Cole, James Colin	Ottawa.	Clegg, Samuel	Peterboro.
Cameron, Wm	Midland	Clairmont, William L Cook, Sidney P. W	Spanish Station
Cain, Robert	Thessalon	Corrigan, John	Baysville.
Cochrane, George	Peterboro.	Chalmers, Alexander M	Peterboro.
Cobarn, John	Lindsay.	Charlton, George A	Collingwood.
Crowe, Nathaniel	Bobcaygeon.	Cahill, Thomas	Nosbonsing.
Cameron, Alexander	Norman.	Chew, Manley	Midland.
Chrysler, Frank R. L	. Webbwood.	Cooper, James Eddly	Saurin.
Callaghan, Thos., Jr	. Campbellford.	Cook, Reinhardt	South River.
Carson, HughCalder, George	Kenora.	Crowe, Cecil	Trenton

Name.	P.O. Address	Name	P.O. Address
Campbell, Daniel N	Buckingh'm, Que	Doris, Patrick	Peterborough.
Canniff, R. W	Kenora.	Doris, John	Peterborough.
Cassidy, S. C		Donahoe, Michael	Erinsville.
Charleson, John Baptiste	Ottawa.	Doran, W	Belleville.
Comer, Billa F	Tweed.	Dickson, Robert R	
Carter, George	Sunariage.	Donlevy, Wm. C	
Corrigan, Robt. T	Coldwater	Duff, Chas. A Dean, James C	
Caswell, Geo	Coldwater.	Duff, Peter A	
Chemir, David A		Duncan, Downey	
Clairmont, Philadelp L		Dougherty, J. M	
Crowe, Edgerton		Dunn, John F	Spanish Mills.
Castonquay, A. C	Chelmsford.	Dyke, Morris F	Blind River.
Clark, Donald Allan	Port Arthur.	Devitt, Frank	Dinorwic.
Charette, Herbert	Devlin.	Dickie, David	Port Arthur.
Christie, Uriah W	Fort Frances.	Enland Olimon	C
Clark, Joseph C		Enlaw, Oliver	Campbelliord.
Crowe, Leslie		Ebert, Andrew P	
Campbell, Duncan W		Ellis, Alexander	
Clements, Albert James		Errington, Joseph	
Carney, Albert		Eddington, Henry John	Parry Sound.
Collins, Arthur	Massey Station.	Enright, Daniel	
Carter George		Eager, James	
Chitty, Alfred E	Kenora.	Elliott, Porter P	Mine Centre.
		Elliott, William	
Didier, Hector	Mattawa.	Edgar, J. E	Rat Portage.
Doran, Frank	Barryvale.	Elliott, George E	Peterborough.
Dunning, E. Percival	Parry Sound.	D Talan A	17
Duff, R. J		Fraser, John A	
Durrill, John W		Ferguson, Wm. H	McLean's Denot
Dickson, Jas. L		Fitzgerald, E. Clair	Parry Sound
Dobie, Harry		Farrell, W. H	
Deacon, Charles	Sault Ste. Marie.	French, Lewis William	
Danter, R. W		Fraser, William A	
Doyle, T. J	Eau Clair.	Finnerty, Patrick	
Dobie, Alexander R		Farnand, Frank	
Darling J. M		Fulton, Philip S	
Dillon John	Calabogie.	Fitzgerald, Ullyot C	Parry Sound.
Durrell, Jos, Nelson	Callandar	Fenn, George	
Durrell, John	Sunhury	Fortune, Owen	
Devine William		France, John	
Durrill, William	Nosbonsing.	Ferguson, Ernest A	
Draper, Patrick	Quyon, Que.	Ferguson, Alpheu	
Davis, J. P	Bobcaygeon.	Ford, John William B	P'r'tge du F'rt, (
Dale, John Alexander	Birkendale.	Ford, Charles	
Dinsmore, Chas. L	Huntsville.	Findlay, J. H	
Drum, Patrick	Belleville.	Fraser, James	Rentrew.
Durham, Edgar S	Wobbwood	Fairen, Francis	
Duquette, Chas	Robesveson	Faulkner, Jos Fraser, Alexander, Jr	Westmeath
Dickson, Robert Alexander.	Keene.	Fairbairn, William	Calabogie.
Dawkins, John		Fraser, Wm. A	
Doxsee, James E	Gravenhurst.	Fraser, Foster	Pembroke.
Didier, L. P	Aylmer, Que.	Fraser, Wm	Little Current.
Devine, Patrick J	Sheenboro, Que.	Fraser, Hugh Alexander	Pembroke.
Dinsmore, Richard	Huntsville.	Flaherty, John	Lindsay.
Dunn, Percy E		Fisher, WmFox, Thomas	renton.
Duval Chas			

Name	P.O. Address	Name.	P. O. Address.
Fairbairn, N. H	Webbwood	German, Maurice J	Fanalan Falls
Friel, John	Trenton.	Gillies, John A	
Fox, Charles		Goddin, Edward	
Featherstonhaugh, Wm. H'y.		Grant, Joseph	Eganville.
Friar, Schuyler	Westmeath.	Gilmour, James B	Braeside.
Farren, Joel	Savanne.	Gorman, Joseph P	Sault Ste. Marie.
Fraser, Duncan	Big Forks	Gordon, Thomas A	Hall's Bridge.
Freestone, Walter	Burk's Falls.	Gray, Albert H	
Fraser, John	Spanish Station	Gadway, John	
Fitzgerald, D. C	Searchmont	Garrow, Edward	Dorget
Frazer, Jas. C	Spanish Mills.	Gillies, Harry	
Fremlin, H.P	Richards Land'g.	Gordon, Herbert C	Nelson.
Fremlin, H.P	Sault Ste. Marie.	Gillespie, M. H	
Farrel, Peter M	Whitefish.	Griffin, William	Huntsville.
Fairhall, Edward	Whiteside.	Ganton, David	Trout Creek.
Fraser, Levi		Graham, George L	Arnprior.
Fiddes, James		Graham, Frederick S Gill, Cuthbert	Arnprior.
Frawley, Frank	Sault Ste Marie	Graham, James Robert	
Filiatrault J. A	Blind River.	Graham, Thomas Jordan	
Farrier, John William		Gaudaur, Antoine Daniel	Orillia.
Finney, Benjamin B		Gorman, Patrick	
		Guy, Charles:	Fort Frances.
Griffith Geo. F	Pembroke.	Graham, George H	
Graham, John	Arnprior.	Greer, George P	
Golden, Jno	Gilmour.	Gill, Charles	Fort Frances.
Gunter, Henry M	Rardsville	Hurd, Cyrus	Parry Sound
Green, Forman A	Gilmour.	Henderson, Albert E	Burford
Green, Samuel E	Parry Sound.	Hale, John B	Sault Ste. Marie.
Grant, John	Flinton.	Hickerson, Melvin T	Fort Frances.
Green, Arthur	Ottawa.	Howey, George H	
Green, Norman McL	Bancroft.	Hartt, James	Gilmour.
Gillis, John J	Whitehsh.	Hayes, James	Enterprise.
George R	Parry Sound	Humphrey, T. W	French River
Golden, Frank J		Handley, Robert	Donglas
Garson, Robert	Thessalon.	Howe, Alexander	Queensborough.
Gropp, August	Penetanguishene	Hurd, Edwin	Hurdville.
Grozelle, Antoine D	Muskoka Mills.	Huff, J. S. Morris	Arnprior.
Goulais, James	Peterborough.	Halliday, Robert J	Lindsay.
Grayson, Charles	Cook's Mills	Hutton, John	Huntsville
Guertin, Oliver	Biscotssing.	Hogarth, Joseph Rowan	Pembroke
Gelinas, Frank	Hull, Que.	Humphrey, John	Gravenhurst.
Gwynne, John	Hawkesbury.	Hill, Joshua	Midland.
Gray, Frederick M	Brule Lake.	Hall, David	Lovering.
Graham, Edward G		Hartley, Charles	Peterborough.
Griffin, James		Hawkins, Henry Charles	
Gordon, Alexander B Gareau, Noah J	Pen broke.	Hines, Philip Wallace Hudson, John Lewis	Huntsville.
Gillies, D. A.	Carleton Place	Hurdman, William H	Ombermere.
Gilligan, Edward		Hughes, John.	North Bay.
Gladman, Charles	Parry Sound.	Howie, R. G	New Liskeard.
Garrow, John D	Ottawa.	Helferty, Dennis	Eganville.
German, William Burton	Wahnapitae.	Hamilton, Robert	Kenora.
Gordon, Robert W	Petamore.	Hoppins, Abiram	Kingston.
Guertin, Nelson		Hoppins, Densmore	Kingston.
Gardener, John		Henderson, John Irwin	Robeavgeon
Glennie, William		Hartley, William	Millbridge.
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Name.	P.O. Address.	Name.	P. O. Address.
Higgins, John C	Peterborough.	Kennedy, Timothy	Enterprise.
Harrison, John, Jr	Pembroke.	Kirk, Henry	Trenton.
Hawkins, E	Le Breton Flats.	Knox. Milton	Ottawa.
Henderson, Charles	Bracebridge.	Kinsella, Michael Pierce	
Halliday, Frank	Orillia	Kitchen, D Kelly, Jeremiah	
Hall, Charles Asa	Penetanguishene	Kelly, Ferdinand	
Hearl, John	Callander.	Kennedy, T. J.	
Howe, Isaac	Fort Frances.	Kenning, Henry	Pembroke.
Halliday, James	Springtown.	Kirby, D. F	
Hurdman, J. A	Ottawa.	Kirkpatrick, David	Lindsay.
Hawkins, Stonewall J		Kean, John F	
Hinchcliffe, William		Kellett, Fred	
Hillis, James M	Sutton West.	Kirk, William James	
Harris, William, Jr	Day Mills.	Kerr, E. G	
Hogg, W. J	North Bay.	King, Napoleon	Mattawa.
Hoxie. E. P	Katrine.	Kean, B. F	Orillia.
Hawkins, Walter	rembroke.	Kemp, Orval Wesley	
Howard, James	Ravsville	Kirk, Charles Barron Kingsland, W. P	
Hogan, Enos W	Savanne.	Kerr, John B	Arnprior.
Horne, John T		Kennedy, Walter	Arnprior.
Hamilton, Chas. E		Kennedy, John	Pembroke.
Henderson, Leonard		Knox, Wm. M	Fesserton.
Hunter, Thos		Kingston, Robert Kearnan, Edward	
Hamilton, Robert J Hawkins, William A	Pembroke.	Kearney, Michael John	
Herring, Edward C	Sebright.	Kendrick, John	
Hatch, J. W	Dryden.	Kendrick, John L	Burk's Falls.
Hoard, Wm. Paris	Emo.	Kennedy, John W	Ottawa.
Irving, Thos. H	Parry Sound	Kelly, James F Kauffman, Julias	
Irwin, Eli		Kennedy, Sylvester	
Irving, Edward C		Kernahan, George A	Barwick.
Islandan Dalah E	Deut Author	Kehoe, Martin	Huntsville.
Johnston, Ralph E Johns, Frank A		Leannoth, Francis	Arnarior
Jackson, Robert		Lee, James	
Johnson, Finlay		Llovd, Alfred	Severn Bridge.
Jones, Albert	Victoria Harber.	Lawrie, Frank A	Parry Sound.
Johnson, Thomas	Bobcaygeon.	Latimer, Jas	Frank's Bay.
Johnston, Archibald M Julien, Charles		Lemyre, Middey Lutz, Jacob	
Junkin, Henry		Luby, John E	Ottawa.
Johns, Frank	NipissingJunct'n	Law, Wm. J	Markstay.
Jessup, Edward D	Cache Bay.	Lummis, Daniel	Glanmire.
Johnson, Frank N	Ottawa.	Lowe, W. C.	Port Arthur.
Johnson, S. M.	Peninsular Lake.	Londry, S. C	Sault Ste. Marie.
Jones, Frederick James	Flinton	Lochnan, James	Ottawa.
Johnston, William A	Castleford.	Ladarotte, John	Arnprior.
Jervis, Henry	Wisawasa.	Lochnan, John	. Aylmer, Que.
Jones, William	Fenelon Falls.	Lozo, John.	
James, Martin		Loughrin, Lawrence Linton, J. H	
Johnston, James Johns, Alexander	Callander	Ludgate, James	
Jackson, John A		Lee, Robert	
		Langford, Mark	. Baysville.
Kintree, Stuart	Little Rapids.	Letherby, Edwin	
Kerby, John Kennedy, Robert	Marmore	Lealry, Francis M	. Onapean, Que. Baysville
Kirby, Louis Russell	Ottawa.	Lessard, Philip	Kenora.

Name.	P.O. Address.	Name.	P.O. Address.
Lovering, William James	Coldwater.	Molyneaux, George	Parry Sound,
Lane, Maurice	Bobcaygeon.	Milway, Joseph	Fort William.
Lenton, George		Mackie, Nathan	Port Arthur.
Lowe, Thos. A		Milne, Archie	Arnprior.
Livingston, Robert M	Huntsville.	Murray, James	Peterborough.
Londry, William E	Sault Ste. Marie.	Moore, James A. E	Lakefield.
Labelle, James	Waltham, Que.	Merkley, William A	
Labelle, Eli	Waltham, Que.	Murphy, Hugh R	Ottawa East.
Ladurante, J. D		Murphy, W. J Murray, William	Arnprior.
Ludgate, Theodore	Peterborougn.	Macfarlana Dahart I	Markstay.
Lucas, Frank	Callfold One	Macfarlane, Robert L	Warren.
Lunam, Duncan		Martin, Fdgerton	Markstay. Fort Frances.
Lott, George	Parry Sound	Moore, Henry R	Lakefield.
Lovering, George Francis		Mickle, Charles S	Gravenhurst.
Lucas, R. G		Mullen, James	Webbwood.
LeBlanc, Edmund C. Chapleau		Morley, A. W.	Winnipeg.
Lavigne, John		Macdonald, James M	North Bay.
Landell, Charles S		Money, Harry	Haileybury.
Long, Henry Elisha		Mather, Allan	Keewatin.
Lynch, W. H	Collingwood.	Menzies, Alexander	Sault Ste. Marie.
Laplante, Francis	Byng Inlet.	Munroe, Peter P	Commanda.
Lindsay, Jas		Mason Benjamin	Westmeath.
Labelle, Michael		Monaghan, John B	
Legree, John	Dacre.	Monaghan, M. J	Arnprior.
Legree, James L	Calabogie.	Mulvihill, John	Amprior.
Leigh, John Chas	Gravenhurst.	Moran, Andrew	
Lloyd, Edward B	King.	Mulvihill, Michael	Arnprior.
Lemyre, Bruno	Cance Lake	Mann, John	Manitowaning.
Lyons, James	Waltham Sta O	Monaghan, John Dorland	
	Ottawa.	Matheson, Wm	Chelmsford.
Levelle, Emery	Waltham Sta., O.	Munro, Alex. G	
Little, Theo	Kenora.	Murphy, Oliver A	
Lehman, Joseph	Stratton Station.	Mellor Charles	Port Arthur.
Lafare, Mark	Cache Bay.	Millions, Harry	Gillies Depot.
	Vermilion Bay.	MacDonell, R. D	Bisc tasing.
Lott, Angus M	Spanish Mills.	Milne, Fred	
36.11 36.3	T) '11	Miller, P. H	
Malloy, Mark	Baysville.	Munro, Philip	
Martin, Hugh	Sault St. Marie.	Mangan, Patrick	
Miller, R. O	Toronto.	Marcil, Peter	Chanish Station
Murray, Frederick		Morley, Charles	Huntsville
Menzies, Archibald	Burk's Falls	Moore, David Henry	Peterborongh
Manning, James	Trenton.	Murphy, John	Amprior.
Martin Philip	Stoco.	Mathieson, Daniel	Chelmsford.
Malone, Wm. Pat	Ottawa.	Milne, Wm	Ethel.
Marsh, Esli Terril	Trenton.	Mangan, Charles	Burk's Falls.
Millar, John W	Huntsville.	Mooney, Lincoln	Orillia.
Mutchinbacker, Asa	Rosseau Falls.	Mangan, John	Arnprior.
Morris, George F	French Bay.	Mooney, Thomas	Kingston
Murray, George Jr	Waubaushene.	Mason, Robt. T	Rochesterville.
Maughan, Joseph	Port Anther	Moore, Wm. John	
Margach, Wm. J		Morrison, Donald	
Murray, George Sr Maniece, Wn1	Peterboropek	Moore, Wm	
Murray, Wm	Kenora	Mutchenbacker, Herman Moore, Norman	
Morgan, Richard, J	Kenora	Morley, John R	
Magee, Thomas Arthur	Kenora.	Mackay, J. A	
Murdoch, James	Cook's Mills	Miller, Robt	Montreal.
Mulvahil, Wm	Arnprior.		
	044-	M.O Tanank D	m
Murphy, Arthur	Ottawa.	McCaw, Joseph E	Tweea.

Name.	P. O. Address.	Name.	P. O. Address.
McLaren, Peter	Kenora.	McDonald, James P	French River.
McGregor, Colin F	. Kenora.	McFarlane, Jos. C	
McKenzie, Robert	. Kenora.	McNabb, Alexander	Thessalon.
McFadyen, A. J	. Bracebridge.	McGillivray, Archibald	Port Arthur.
McCaulay, Thos. J	Goulais Bay.	McGrane, Edward	Lindsay.
McDonald, John C	. Spanish Mills.	McLeod, Donald, Jr	Keewatin.
McKenzie, Alex. E	Ansonia.	MaDougall Duncen	Broschwiden
McIntyre, John	Orillia	McDougall, Duncan	Warren
McDermott, Jas. E	North Bay	McCormack, John C	Sudbury.
McCrindle, Jas	Sudbury.	McNamara, John	
McGhie, Chas. S		McGillivray, Duncan D	Algoma Mills.
McGenigal, John H	Whitby.	McIntyre, Daniel A	Klock's Mills.
McCart, Patrick	. Arnprior.	McNamara, Lewis	Klock's Mills.
McGrath, Thos. B		McDonald, Sydney C	Mattawa.
McCormick, James J	. Trenton.	McGurn, Jno. J	Buckingham, Qu
McCarthy, Wm		McKeown, Jno. Joseph	
McAvoy, Owen	. Campbelliord.	McNeei, David	Sault Ste. Marie
McConnell, Lewis		McEwan, Andrew	Cartion.
McMullen, George	Rurnston n	McCollum, Donald	Arnprior
McColgan, C. H.		McDowell, Wm.	Cache Bay.
McCallum, Webster		McConnachie, Roy Stewart	Huntsville.
McCagherty, Robert E	. Westmeath.	McDonell, J. K	Rat Portage.
McNab, Archie	. Calabogie.	McDonald, Alex. J	Vermilion Bay.
McDonald, Malcolm	. Spragge.	McKay, D. A	Rainy Bay.
McIvor, J. A	. Fort Frances.	McMillan, James	Kenora.
McCulloch, M	. Kenora.	McPhee, Ronald	
McDonagh, Rod	. Callander.	McKay, George Donner	Dorset.
McManus, James	Amprior.	McWilliams, Maxwell	Detanhananal
McKinley, J. H	Curran.	Theodore	
McPherson, Jas. S McKinley, Edward C	Toronto	McLeod, John	
McClelland, John	Parry Sound	McDougall, John D	
McFarlane, J. W	Cache Bay	McGregor, Duncan	Burnstown.
McDonald, Roderick	. Pembroke.	McLean, Peter W	Sand Point.
McCormack, Wm	Pembroke.	McNichol, John	Sudbury.
McCreary, William	. Arnprior.	McInnis, D. E	Cache Bay.
McCuaig, James C	. Bryson.	McLaughlin, Samuel	Waubaushene.
McColman, Peter	North Bay.	McCollman, John	
McLeod, James D		McManus, John C	
McCrimmon, N. K		McLean, John	
McCreary, James, Jr		McLeod, Norman	Blind Bivor
McPhee, Hugh	Arperior	McLean, James	
McLachlin, J. A	Arnprior.	McNabb, Alexander	
Macpherson, John	Ottawa.	McFarlane, Alexander	Renfrew.
McEachren, John A	Gravenhurst W.	McFarlane, J, D.	Stewartsville.
McLeod, Dugald		McFarlane, Duncan	
McClelland, R. H	. Parry Sound.	McKendry, Wm. B	Arnprior.
McEvoy, Frank		McPhee, Hugh	Renfrew.
McDermott, Peter	. Orillia.	McPhee, John	Arnprior.
Mellroy, John	. Madoc.	McLachlin, Peter	Arnprior.
McNab, Robert J	Parry Sound.	McLachlin, Alexander	Amprior.
McFadden, James McIntosh, James G	Corloton Place	Mackey, Edward	Troptor.
McIntosn, James G McInnis, Hector D	Bracebridge	McEwan, Henry	
McKinnon, Malcolm	Rracebridge.	McDonald, Alfred	Sundridge
McLean, Daniel	Bracebridge.	McDonald, Archibald W	Gilmour.
McKinnon, Archie J	Bracebridge	McCaw, John Gillen	Queeushorough
McKay, D. C	Baysville.	McCauley, Barney	Trenton.
McDonald, James	. Parry Sound.	McDougall, James T	Klock's Mills.
McPherson, Allan		McInerly, Thomas	1

	1		
Name.	P. O. Address.	Name.	P. O. Address.
McBride, Archibald	Arnorior.	Newall, John H	Parry Harbor
McFarlane, Robert L	Arnprior.	Nolan, John	Gravenhurst.
McGowan, Wm	Parry Sound.	Newton, Charles W	Victoria Harbor.
McLachlin, Norman	Arnprior.	Nent, Charles	Vermilion Bay.
McDonald, Laughlin McIvor, William J	Pendleton. Collins Inlet.	Needham, John G	Pakenham.
McKee, John P	Sturgeon Falls.	Oullette, Joseph P	
McGowan, Thomas	Parry Sound.	O'Neil, Thomas	Bancroft.
McDermot, Patrick		O'Neill, Daniel H. H	
McKay, Angus	South River.	O'Leary, Patrick J	Orillia.
McDonald, A. J.	Longford.	Oliver, Charles R	Fesserton.
McInnis, Ángus D	Gravenhurst.	Overend, George J	
McKendry, Alexander	Waubaushene.	O'Brien, Andrew	Ottawa.
McGuire, Timothy	North Bay.	O'Brien, Frank G	
McGrath, John		Oliver, J. A	
McWilliams, John Bannon		Owen, W. J.	wanigoon.
McCagherty, Patrick	westmeath.	O'Connor, John	Hintonburg.
McKendry, Daniel	Domes Com d	Oliver, Darcy	
MacDonald, D. F		O'Connor, Wm	Nosbonsing.
McManus, Thomas J Macfarlane, David R		O'Neill, James W O'Donnell, Wm	Dunoten muich en e
McColgan, Edward		Owens, Richard	Regin Donot
McKay, John		O'Reilly, Patrick	Cartier
McKinnon, William		O'Neill, Mark	Ronfrow
McKittrick, Frank R. F		Orrill, John	Trenton
McMichael, Charles		O'Neill, Patrick	Bancroft.
McIlroy, Thomas Davis	Madoc.	Orde, Francis W	Kenora.
McDonald, Wm. Henry		O'Driscoll, Joseph	Sault Ste. Marie
McGaw. Wm. Thomas	Callander.		200. 220.
McGaw, Wm. Thomas McMillan, L	Callander.	Pigott, John	Fitzrov Harbor.
McDermott, John L	Orillia.	Paul, Charles A	Sault Ste. Marie.
McDonald, Chas. M	Pembroke.	Pattinson, Thos	Bracebidge.
McPhee, Benjamin	Pembroke.	Price, A. E	Arnprior.
McGee, John Edward	Parry Sound.	Presley, J. F	Ashton.
Macfarlane, Mack		Power, James	Bobcaygeon.
MacCallum, Alexander	Braeside.	Patzel, Adolph	Arnprior.
McRae, Farquhar	Kenora.	Plaunt, William B	Eganville.
MacCallum, Albert		Plaunt, Joseph	Eganville.
McGonigal, John	Arnprior.	Porter, Charles C	
McConachie, John	Huntsville.	Preston, R. E	
McKay, D. G	Nellora.	Petrie, George A	
McDonald, James	Loredolo	Pomeroy, Peter	Reing Inlot N'th
McCulloch, John L McConnell, James	Mine Centre	Purcall, W. G.	Ottawa
McIntyre, William John	Port Arthur	Purvis, John	Parry Sound
McDonald, Allen	Big Forks	Porter, James	Unhill
McLay, Albert	Devlin.	Pearson, John James	Lindsay.
McQuarrie, Daniel	Fort Frances.	Penney, Chas. G	Cache Bay.
McNaughton Daniel	Bracebridge.	Pennock, James P	Hardwood Lake.
McNaughton, Daniel McCagnerty, William E	Westmeath.	Purdy, John A	Uxbridge.
McDonald, John D	Mattawa.	Playfair, R. J	
McCagherty, Joseph T	Westmeath.	Paterson, John	Wahnapitae.
McCagherty, Joseph T McAdam, Arch. H	Quyon, Que.	Paterson, Alexander	Orillia.
McMurphy, Dugald, Jr	Kenora.	Parke, James	Gravenhurst.
McCall, Alfred	Kenora.	Parquette, Oliver	Webbwood.
McRitchie, William	Kenora. ·	Palmateer, Sherman	Gravenhurst.
McRitchie, Malcolm		Paget, George	Huntsville.
		l'ounder, Joseph	Westmeath.
		Pell, Richard D	Arnprior.
Nescott, George	Kenora.	Ten, Inchara D.	
Nescott, George Newton, Frank	Gravenhurst.	Perry, Frederick	Port Arthur.
Newton, Frank Newburn, Wm	Gravenhurst. Parry Sound.	Perry, Frederick Paget, Charles Edward	Port Arthur. Novar.
Newton, Frank	Gravenhurst. Parry Sound. Arnprior.	Perry, Frederick	Port Arthur. Novar. Dorset.

Name.	P. O. Addres	Name.	P. O. Addres
yburn, David J	Dorset.	Raycroft, William T	Sarnia.
urdy, Geo	Hintonburg.	Roberts, Ivor M	Garden River.
layfair, Andrew W	m Sault Ste. Mar	ie. Revell, Lionel Oliver	W. Gravenhu
ipe, Taylor	Haileybury.	Regan, Judd Patrick	Orillia.
ipher, George E		Robins, Etna, Rosedale	Orillia.
endee, David	Parry Sound.	Regan, John Jr	
iper, A. J	Blind River.	Ryan, James	Savanne.
	72.1	Rusk, Oscar W	
	Peterborough.	Robinson, Thos. Geo	Bracebridge.
	Penetang.	Rooksby, Wm	Campbelliord.
uirk, Thomas J	Petewawa.	Ramesbottom, Robt	
1. h	77	Roy, Lewis.	
Robertson, D		Riddell, Horace, A	
Richardson, Frederic	Tamusath	Rowan, A. L	Sault Ste. Mar
		Ritchie, James A	spragge.
	nderRochesterville		Fort William
Pobinson Wm F	cLean Dunchurch. Bobcaygeon.	Smith, M. D	Enterprise
Coamabottom Wm	Mattawa.	Sutherland, D. H	Graven hurst
	Brentwood.	Spanner, John	
Randall Lewis G	French River.	Shier, James D	
Richardson, Charles		Spooner, W. R	Katrine
Rochester, Daniel B		Simpson, Alfred E	Wakefield
Riddell, James		Souliere, John B	
Rice. Asa A	Hull, Que.	Shields, James A	
oberts, T. A	Huntsville.	Spargo, George	
Ross. Andrew	Longford Mills		
Rose, Donald M		Salmon, R. H	Baysville.
	gar Coldwater.	Salmon, Alexander C	Baysville.
Ross, George	Waubaushene.	Stremer, A	Ottawa.
	Keewatin.	Shields, Frank A	Parry Sound.
	Little Current		
Ramsay, Robert	Arnprior.	Sloan, William H	Fort Frances.
	Arnprior.	Smyth, Job E	Cache Bay.
Ritter, Samuel G	Ahmic Harbou	ır Sage, Nelson	Muskoka Mill
	Sturgeon Falls	. Seymour, Edward	Whitefish.
kyan, Altred	Byng Inlet.	Shaw, Thomas B	Waubaushene
logers, Fred	Sault Ste. Mar	ie. Swanston, James	Peterborough.
keid, George Willia	m Fort Frances.	Simpson, William	Hall's Bridge.
Robertson, John A.	Kenora.	Sadler, Thomas	
Reid, Joseph B	Bobcaygeon.	Smith, Patrick Albert Snaith, Wm. J	Mottome
		Sinn, William F	Arnprior
Ross, Walter M	Carleton Place		Wanhanshana
Richards, Benedict.		Spears, Milton B	Rarry's Ray
Regan, John	Orillia	Stevenson, Arthur	Peterborough
Russel, Wm	Pembroke.	Stein, Paul	Sault Ste. Ma
Ramsay, Charles	Sudbury.	Shaw, Alfred	
Russell, Corsan L	Pembroke.	Sequin, Napoleon	Spanish Statio
Richards, Henry	Dacre.	Scrim, Robert	
Ryan, Wm	Killaloe.	Sharp, James A	Sudbury.
Reid, John P	Spanish Mills.	Shaneav, Harry S	Cook's Mills.
Ridley, Robert		Smith, Wm	Ottawa.
Riley, Charles W	Hutton House	, Stewart, Daniel	Braeside.
Raymond, Morris T	Spanish Mills.	Sheehan, Michael II	Waubaushene
Rooney, Wm. H	Campbellford.	Smith, Sydney H	
Revell, J. O	Dryden.	Stewart, James A	
Rankin, Anthony	Cache Bay.	Sproule, Newton H	
Ross, Angus	Orrville.	Simmons, Alex	
Kobinson, Albert E	Washago.	Scott, Thomas	
Robinson, Edward.	Waahaaa	Smith, Lawrence	W Samman H

Name.	D () Addmong		
	P. O. Address.	Name.	P. O. Address.
Sullivan, John	Sault Ste. Marie.	Thompson, Joseph H	Bracebridge.
Sinclair, Finlay	Sudbury.	Taylor, Edward A	Westmeath.
Shiels, Henry F	Cartier.	Tait, Ralph	Arnprior.
Smith, Gideon Ousley	Burk's Falls.	Train, William	Burk's Falls.
Smith, John Wallis		Turner, Garvin F	North Bay.
Smith, Henry G	Arnprior.	Tilson, Joseph	
Story, John A	Ottawa.	Tuffy, John	Cartier.
Sweezy, Benjamin	Massey.	Thorpe, Thos	
Sheppard, Charles H Sinclair, Arnon D	Arnorior	Taylor, Chas. E	
Smith, Sidney E	Ottawa	Tulloch, William A	
Sleeman, Wm	Rapid River	Taylor, Alex. M	
Sheeman, Peter F	Loring.	Toner, J. A	
Sleeman, Geo	Rapid River.	Thrasher, Henry G	
Sims, William K	Sault St. Marie.	Tooke, Frank	
Skahill, William	Blind River.		
Shaw, George	Thessalon.	Udy, Dean	French River.
Sarsfield, George Francis	Sault Ste. Marie.	Urquhart, Elias	Gravenhurst.
Standish, William H		Urquhart, Andrew	Barrie
Simpson, William A	Lakeneid. [Bay.	Viennes Demorr I	Dufferin Duid-
Scollard, Wm		Vigrass, Percy J	Warren.
Shuttleworth, Alma Shanacy, Wm. J		Vincent, Joseph	Nosbonsing.
Seely, George		Vannier, Nelson Joseph	
Stewart, Alex. W	Lanark.		Fesserton.
Soreny, William		Vincent, Henry T	
Schneder, Frederick		Vanderburg, Norman	
Smith, James D	Rat Portage.		Mattawa.
Sullivan, Jas			
Scully, Cornelius		White, Thomas S	Bracebridge.
	North Bay.	White, A. Thomson	l'embroke.
Smith, Walter J	Campbellford.	Watt, R. A	Spanish.
Smith, Alex. R. C.	Burk's Falls.	Wallace, T. William	Rlind River
Stewart, Richard M		White, Joseph W	Bracebridge
Souliere, John H		Watson, Wm	Huntsville.
Smith, Ábraim G		Webb, Geo. W	
Swallow, C. H		Wilcox, Thomas	Parry Sound.
Strave, A. M		Wheeler, J. A. McL	
Stewart, John		Widdifield, C. H	Pine Orchard.
Sullivan, George L		Whitmore, Edgar	Rosseau Falls.
Short, James	Kenora.	Wright, L. B	Sault Ste. Marie.
Taylor, Fred L	Parry Sound	Ward, Joseph W	French River.
Thomas, Griff J		Waldie, John E	Victoria Harbor
	Biscotasing.	Wigg, Thomas G	Thessalon.
Tait, Thomas B	Burk's Falls.	Wall, Patrick B	Chebovgan, Mich
Taylor, C. M	Gravenhurst.	Wells, John R	Little Current.
Thornton, W. D	Longford Mills.	Whiteside, John	Huntsville.
Trussler, Gilbert	Trout Creek.	Watt, Wm	Peterborough.
Thompson, Geo. S	Lindsay.	Wilson, George	Lindsay.
Thompson, Frederick A. H		White, Thomas	
Thompson, Francis Henry		Wood, William D	Sault Ste. Marie.
Train, A. C	Cook's Mills	Watts, John J	Fort Frances.
Turgeon George	Sault Ste Maria	Wright, Percy	Fort Frances
Thompson, Alexander W	Arnorior	Watts, William B	Fort Frances
Taylor, Thomas G.	Gravenburst.	Watson, Wm	North Bay.
Taylor, Thomas G	Arnprior.	Wagner, Fred	Kenora.
Tucker, Louis A	Fort Frances.	Wainwright, Edward C	Huntsville.
Thompson, Daniel	P'rt'ge du F'rt,Q.	Wilson, Wm. James	Deseronto.
	Kenora.	Weston, Frank R	Midland

Appendix No. 51—Concluded.

Name. P.O. Addre	ess. Name.	P.O. Address
White, James B. Manitowanir Warren, Robt. M. Cache Bay.	White, Allan	Pembroke. Fort Frances.
Wilson, Geo. A Balsam Hill. Welch, Harold Milberta.		Fort Frances.
Wilson, James A., Jr Webbwood. Woods, John R Antrim.	White, William	Peterborough.
Wardell, Ernest C. S Victoria Har Woods, Joseph F Roach's Poir	bor. White, John B	Kippewa, Que
Whaley, Thomas		
Wornsdorf, Frederick Gutlep. Pembroke. Warrell, Wm Trout Creek.	Young, R. H	Fort Frances.
Wims, Peter Blessington.	Young, Wm	Severn Bridge.
Wilson, Edward Deseronto.	Young, A. JYoung, Samuel	Coldwater.
Whelan, P. J	Young, Patrick P Young, Francis G	Young's Point.
Watterworth, J. A Sault Ste. M White, Win. James Muskoka Fal	lls. Yuill, A. D	Braeside.
Warrell, George Powassan. Wells, George W Little Currer	rt. Young, C. T	Harvey.
Wilson, Frederick Gould Kenora. Wallace, John Thomas Thessalon.	Yuill, Archibald Yuill, Wm	Bracebridge.
Wilkins, George N Baysville. Wylie, Byron M Webbwood.	Total 1264.	Diaeside.

AUBREY WHITE,
Deputy Minister.

A HISTORY OF CROWN TIMBER REGULATIONS.

From the date of the French Occupation to the Present Time.

Compiled with the Assistance of Mr. Aubrey White, Deputy Minister of Lands and Forests.

Reprinted from the Annual Report of the Clerk of Forestry, for the Province of Ontario, 1899.

The French Regime.—The Seigniors.

The Ontario system of dealing with the timber upon Crown Lands, as it exists to-day, is far in advance of any other system of regulating the disposal of public timber resources on this Continent. Those in charge of it from time to time have made greater efforts to preserve for public uses as large a measure as possible of the country's natural wealth than have been attempted elsewhere. Though, owing to the difference of local conditions. we are, as yet, far from the perfected forestry system of Europe, the result of the increased attention bestowed upon the question of forest preservation has been a gradual development in the direction of modified forestry methods. calculated to secure the perpetuation of the woodlands with the least possible disturbance of existing interests. The latest legislation providing for the establishment of forest reserves is a further step to the same end. designed not only to secure for the people the largest possible present return from the timbered area of the Crown domain, but to secure that revenue in perpetuity. In order to a thorough understanding of the present system as it has been evolved by means of numerous modifications and advances from the point of beginning, with a view to possible suggestions for such alterations as may more efficiently subserve the ends in view, it is necessary to study its growth and development from the earliest days of Canadian colonization to the present time. Moreover, to obtain a complete grasp of the subject in all its bearings it is requisite to consider it in connection with the various systems of Crown Land management which have from time to time prevailed. The two branches of administration are so intimately connected that it is hardly possible to treat intelligently of one of them without largely adverting to the other. In fact, during the French Regime the timber resources were regarded as of comparatively little importance and furnished such a small part of the commerce, or the interests of the colony, that they were treated merely as incidental to the general land policy of the Government, and the relations between the Crown, the Seignior and the habitant under the feudal tenure which then prevailed. Apart from the adjustment of the respective rights and privileges of these parties in the timber upon the lands granted for settlement, there can hardly be said to have been any system of timber regulations in existence. The aim of the French in colonizing the banks of the St. Lawrence was to reproduce, as far as possible, in spirit and in form the political and social institutions of France in their New World Empire. They faithfully copied those survivals of the feudal system, based upon the needs and conditions of a bygone age, which, already out of harmony with the growing spirit of industrial and commercial development at home, were doubly unsuited to the environments of a new country. The principal characteristic of the system was the broad and clear-cut distinction between classes recognized by law and embodied in the system under which the lands of the colony were distributed and held. Large areas were allotted to the Seigniors, who were the only class to hold their titles directly from the Crown, and received their grants on the express condition of subdividing them among tenants or censitaires. The conditions upon which the latter obtained their lands not only involved the payment of rents, but the performance of a number of other duties and obligations, not always exactly defined, and numerous reservations and conditions affecting the land, some of which were in accordance with the terms of the original grant, while others appear to have been arbitrary or in accord with ancient feudal custom. The Seignior was invested with privileges of a much more extensive character than appertain to the landlord under the British law, among others the authority of administering justice among his dependents.

A Seignorial Grant.

The following extract from a grant made in 1683 by the Governor and Intendant of Quebec embodies the conditions upon which the Seigniories were usually granted.

Oak Timber Reserved.

"We, in virtue of the power intrusted to us by His Majesty, and in consideration of the different settlements which the said Sieur de la Valliere and the Sieur de la Poterie, his father, have long since made in this country, and in order to afford him the means of augmenting them, have to the said Sieur de la Valliere given, granted, and conceded and by these presents do give, grant and concede the above described tract of land; to have and to hold the same himself, his heirs and assigns forever, under the title of fief, Seigniory, high, middle and low justice (haut, moyen, et basse justice), and also the right of hunting and fishing throughout the extent of the said tract of land; subject to the condition of fealty and homage (foi et hommage) which the said Sieur de la Valliere, his said heirs and assigns, shall be held to perform at the Castle of St. Louis in Quebec, of which he shall hold under the customary rights and dues agreeably to the custom of Paris, which shall be followed in this respect provisionally and until otherwise ordained by His Majesty; and that the appeals from the judge of the said place shall lie before the Lieutenant-General of Three Rivers; and also that he shall keep house and home (feu et lieu) and cause the same to be kept by his tenants on the concessions which he may grant them, in default whereof he shall re-enter pleno jure into the possession of the said lands. that the said Sieur de la Valliere shall preserve and cause to be preserved by his tenants within the limits of the said tract of land, the oak timber fit for the building of vessels; and that he shall give immediate notice to the King or to us, of the mines, ores. or minerals, if any be found therein; that he shall leave and cause to be left all necessary roadways and passages; that he shall cause the said tract of land to be cleared and inhabited, and furnished with buildings and cattle within two years from this date, in default whereof the present concession shall be null and void; the whole under the pleasure of His Majesty, by whom he shall be held to have these presents confirmed."

It will be seen that this document comprises a reservation of the oak timber on the domain adapted for shipbuilding. This condition was general if not universal, in all the grants made by the French Crown. The

only aspect of the question in which the Government took any concern was the maintenance of an ample supply of timber for the Royal Navy. Some later grants, in addition to oak, reserved timber for masts and spars, presumably pine. Apart from this object, the disposal made of those pine forests, which in modern estimation form so important a feature of national wealth, by either Seignior or habitant, seems to have been regarded with indifference, and no idea was apparently entertained of holding them as a source of revenue, or a valuable possession of the Government, irrespective of the land. The old records show that the reservation of oak timber in the grants of Seigniories was by no means a dead letter. In 1731 a permission was issued to cut oak timber for a war vessel in the following terms:

Permit to cut Oak.

"It is permitted to Sieur Abbe le Page to cut in the seigniories of Berthier and Dautray two thousand cubic feet of oak wood, following the plans and models which we have caused to be forwarded to serve for the construction of war vessels of five hundred tons, which the King designs to have constructed in Quebec, which timber he shall conduct in rafts (cageux) in the River St. Charles before the palace of this city to be there received and inspected in the customary manner.

"The present permission is given in conformity to the reservation which His Majesty has made of this wood for his service in the concession of lands

and seigniories in this colony.

"We command the Seigniories, the captains and coast officials and all other to whom it may appertain, to aid, and cause to be aided, if it is necessary, the said Sieur le Page in the said exploitation, in return for reasonable wages to those whom he shall employ in the aforesaid exploitation.

"Done at Quebec, the 5th of October, 1731.

"Note.—Similar permission has been extended to Sieur de Bleury, in the Seigniory of Longueuil which abuts on the said Seigniory of Chambly, and for three leagues extending along the River of Sorel on both sides past the said Seigniory of Chambly and descending the said River of Sorel.

(Signed) HOCQUART.

In 1740 the Governor, having been informed that a considerable quantity of oak suitable for the construction of the King's vessels had been found at Isle Jesus in the Seigniories of the Lake of Two Mountains, and in Isle Bizard, issued an ordinance expressly forbidding the proprietors "of whatever quality or conditions they may be" cutting any oak until it had been inspected and such of the trees that were found adapted for naval construction marked and retained. The penalty of any contravention of this ordinance was to be confiscation of the timber and a fine of ten livres for each tree destroyed.

Early Settlers' Grievances.—The property of the Crown.

The reservation of all oak trees, as in the case of the present reservation of white pine in patents granted to settlers, sometimes created difficulties in regard to the clearance of the land. Obviously if the reserved trees grew in any considerable number on the habitant's grant he could not fulfil simultaneously his undertaking to clear the land and the stipulations as to pre-

serving the timber. A case arising out of a dilemma of this sort in 1722 is on record, when Michael Laliberte, habitant of Isles Bouchard, appealed to the Governor against his feudal superior, Sieur Desjordy. Laliberte in extending his clearing cut down some oaks, and instead of following what appears to have been the usual practice of burning them on the land, had them sawn into boards. This the Seignior claimed that he had no right to dc under his title deed, whereby oaks were expressly reserved, and by way of penalty confiscated 36 minots of wheat due to Laliberte under an agreement whereby the latter was cultivating land of Desjordy's on shares. Governor decided that as the reservation of oaks in the deed to Laliberte was made in consequence of a clause in the original deed of the Seigniory obliging the proprietor to cause his tenants to reserve the oak timber for the royal navy, the timber could not in any case belong to the Seignior; furthermore, that as it was desirable that the land should be improved, which could not be done without cutting down the trees it was for the public benefit that valuable timber so cut down should be made into boards or cordwood, rather than burned on the spot, as the money so realized would help the inhabitants to establish themselves. Accordingly Sieur Desjordy was prohibited from further troubling his tenants when getting out and disposing of oak timber in future in the process of extending their clearings. In cases where the party cut the timber down solely to sell it without afterwards clearing the land, he was permitted to seize the timber and bring the case before the Governor. It appears from this decision that even at that comparatively early date the powers of a Seignior, however extensive in theory, were nevertheless in course of being very considerably modified in practice.

Trespass.

Complaints as to the trespasses made by the habitants in cutting wood upon ungranted lands or property not belonging to them were of frequent occurrence, and numerous ordinances were issued from time to time in prohibition of the practice. The following ordinance indicates the difficulties experienced by the authorities at an early date in dealing with such cases:

"Upon the complaints which have been made to us by many inhabitants of this city, proprietors of the lands of Cote Saint Jean and neighborhood, that some individuals away from the said lands cut down and carry away, daily, wood for burning, against and in spite of the prohibitions which have been made by many ordinances heretofore given, by which it is forbidden as well to the said inhabitants of this city as to those of the said quarter, to cut down or take away any wood upon the lands of the other inhabitants on penalty of fifty livres fine, and of confiscation of the trucks and horses which shall be found laden with the said wood, which it is necessary to consider in reiterating the said prohibitions.

"We most expressly prohibit and forbid all persons to cut down or carry away any wood on the lands of which they are not proprietors, without previously having obtained the permission of those to whom they belong, on penalty against each of those contravening of fifty livres fine, and of confiscation of the trucks and horses which shall have served to transport the said wood, the said confiscation and fine to be applicable half to the proprietor of the lands upon which the wood shall be taken and the other half to the Hotel Dieu of this City.

"And the present ordinance shall be read, published and affixed at the close of the grand mass of this said city, and of that of the parish of Notre

Dame de Foy, to the end that the inhabitants of this said city and those of the neighborhood shall not be able to pretend cause of ignorance of it.

"We command, etc. "(Signed) MICHAEL BEGON.

"Done at Quebec, the 27th of December, 1713."

A similar prohibition was issued in 1747 at the suit of the Ursuline Nuns of Quebec, proprietors of the Seigniory of Sainte Croix, whose inhabitants were charged with cutting wood upon lands not included in their grants, "which is a considerable injury to them, because the said lands being impoverished no habitant wishes to take them to establish himself there." A penalty of ten livres was accordingly proclaimed for all contraventions of the ordinance, to go to the Fabrique of the parish.

Local Improvement Laws.

Another question which arose at an early day in the history of the province concerned the furnishing of supplies of timber for bridge building. The following ordinance dealing with the subject seems to embody the germs of our modern much criticized local improvement system:

"Michael Begon, Intendant of Justice, police and finances in Canada. Acadia, the Island of Newfoundland and other northern French countries.

"It being necessary to prevent the disputes which may arise on the subject of furnishing the timber necessary for the construction of the bridges over the rivers which pass through the main roads, we ordain that all the timber necessary for the construction of the said bridges shall be taken from the lands nearest the said rivers, considering that the proprietors of these lands receiving the accommodation of these bridges and these rivers ought also to sustain the expense of them.

"We enjoin upon all the inhabitants of the parish where the said bridges shall be made to labor in cutting down all the timber which shall

be necessary for this work, and to deliver it upon the spot. "We command the captain of the district to attend to it.

"(Signed) Begon.

"Done at Quebec, 6th March, 1713."

Oak Reserved for Navy Only.

There appears to have been no reservation of timber in the old grants for military purposes, or any other public use than naval construction. By an ordinance of the Superior Council, dated 10th July, 1664, compensation is directed to be made by the Government to Sieur Poyrier for timber taken from his Seigniory for the construction of casemates, for which he was ordered to be paid the sum of twenty-five livres, tournois. But during the later years of the French regime the tendency was to extend the restrictions under which land was granted, with a view to providing for other public requirements from the timber existing on the grants with-A comprehensive having to make compensation. the subject of the Seigniorial tenures was made to the Legislative J. Williams, Council of Quebec by Hon. Solicitor-General the Province, on the 5th October, 1790. He enumerates the reserves and conditions customary in the ordinary grants, the only one relating to timber being that already referred to, viz.: "That the grantee should conserve all the oak timber growing on his domain, and cause all the oak timber suitable for the construction of the King's ships to be preserved by his

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feudatories and tenants." The more modern grants, the report goes on to say, comprise the same reserves and conditions, but contain yet other stipulations. One of these is as follows:

Army Reserves

"That provided the King has need of any part of the lands granted for the construction of forts, batteries, armouries, magazines or other public works, he shall have the liberty to take such portion, together with the necessary trees and timber, and fuel for the supply of the garrison in the area of the granted lands without being held or obliged to make any compensation for it to the grantee. In many of the later grants the King reserves to himself the right to take oak timber, masts and yards, and all other timber fit for the construction and equipment of his vessels without making any compensation for it. And in one grant the King reserves for himself the red pine to make mouldings (du godron)."

Landlord and Tenant.

The Seigniors, acting no doubt under the influence of Old World traditions, such as frequently maintain themselves longer in an isolated colony than in their original birthplace, appear to have exacted from their tenants many conditions which were not strictly legal. They inserted extensive reservations in the title deeds which were not warranted by the conditions on which they were held from the Crown. The relations between the Seigniors and their tenants, as the system fell into desuetude, continued to be a vexed question in Lower Canada long after the cession of Canada to the British, and were not finally settled until the passing of the Seigniorial Act of 1854," which provided for the extinguishment by compensation of the somewhat shadowy and indeterminate vestiges of the Seigniorial title to lands, the occupants of which had practically become the owners. By this enactment a special court was constituted to ascertain, as far as possible, in just what particulars the claim of the Seigniors for compensation for the relinquishment of all their privileges was legally valid. Among the numerous questions submitted to this tribunal by Hon. Lewis Thomas Drummond, Attorney-General for Lower Canada, in order to arrive at a basis for fixing the amount of compensation to be awarded, was the following relating among other matters to reservations of timber made in the grants by Seigniors to inhabitants other than those specified in the original grants from the Crown.

Seignorial Tenure.

"In various deeds of grant of lands held en roture, covenants are found tending to establish in favor of the Seignior, reservations similar or analogous to the following:—

1. A reservation of the timber for the building of the manor-house, mill and churches without indemnity.

2. A reservation of firewood for the use of the Seignior.

3. A reservation of all marketable timber.

Were these reservations, or any, and which of them, legally made, and do they give the Seignior a right to be indemnified for the suppression of them to be effected by the said Seignorial Act?

The summary of the judgment of the Court upon these points was as

follows:---

"All reserves must be held to be legal the object of which was the obligation upon the tenant (censitaire) to allow the accomplishment by the Seignior on his part, of the obligations of that nature stipulated by the King in the grant of the fief.

Illegal Reservations.

"That the following reservations or others, analogous to them, were illegal and do not give to the Seignior a right to indemnity by reason of their suppression. Art. 1—A reservation of firewood for the use of the Seignior. Art. 2—A reservation of all marketable timber.

"The reservation of timber for the construction of churches without indemnity, and the reservation of the right of fishing and hunting on the lands conceded are illegal and give no right to indemnity.

"The question being put 'is the reservation of timber for the building of the manor-house and mills without indemnity legal, and does it give to the Seignior a right to indemnity for its suppression?" the Court is equally divided."

Briefly then, the main features of the system of timber administration at the close of the period of French rule in Canada were the reservation by the Government of timber adapted for naval and military purposes, and the further customary but not strictly legal, reservations by the Seigniors, of timber for various purposes out of the forest products of the holdings leased to their habitants, with frequent interventions on the part of the authorities to prevent the unauthorized stripping of lands of their timber by those not entitled to it, without any attempt to make the timber resources tributary to the public revenue.

THE BRITISH OCCUPATION.

When the British took possession of the colony in 1763 very elaborate instructions were furnished to the first Governor, James Murray, as to his administration of the new acquisition. The first thought of the Home Government in relation to the forests of Canada was the necessity of preserving the timber for the same purposes which were regarded as of such paramount importance by the French. They appear to have contemplated a more general and systematic method of accomplishing this object than the mere reservation of the timber in the deeds, as will be seen from the following extracts from Governor Murray's instructions dated Dec. 7th, 1763.

"You are therefore to lay out townships of convenient size and extent in such places as you, in your discretion, shall judge most proper; and it is our will and pleasure, that each township do consist of about 20,000 acres, having, as far as may be, natural boundaries extending up into the country and comprehending a necessary part of the river St. Lawrence where it can conviently be had.

The First Forest Reserves.

"And you are also to reserve to us proper quantities of land in each township for the following purposes, viz.: For erecting fortifications and barracks where necessary, or other military or naval services, and more particularly for the growth and production of naval timber if there are any woodlands fit for that purpose.

Strict Regulations.

"And whereas, it has been further represented to us that a great part of the country in the neighborhood of Lake Champlain, and between Lake Champlain and the River St. Lawrence abounds with woods, producing trees fit for masting for our Royal Navy and other useful and necessary timber for our navy constructions; you are therefore expressly directed and required to cause such parts of the said country, or any other within your government that shall appear on survey to abound with such trees and shall be convenient for water carriage, to be reserved to us and to use your utmost endeavor to prevent any waste being committed upon the said tracts by punishing in due course of law any persons who shall cut down or destroy any trees growing thereon, and you are to consider and advise with our council whether some regulation that shall prevent any sawmills whatever from being erected within your government without a license from you or the Commander-in-Chief of our said province for the time being, may not be a means of preventing all waste and destruction in such tracts of land as shall be reserved to us for the purposes aforesaid."

It is to be regretted that these instructions as regards the maintenance of the timber reserves were not carried into effect, the new rulers no doubt finding many matters of a more urgent character on their hands, and possibly concluding as observation revealed the vastness of the supply, that solicitude for the future was superfluous. Had the far-sighted policy outlined by the British Government been followed, and a timber reserve maintained in each township in addition to such extensive reservations of pinegrowing lands as are indicated in this document, with the adoption of precautionary measures against waste and destruction, the agricultural fertility of large overcleared tracts now suffering from greatly diminished productiveness would have been retained, and extensive areas now rendered unproductive by being denuded of their timber, would still contribute to our national prosperity.

Pine Lands Reserved

Twelve years afterward in 1775 the same views were still entertained by the British authorities. Again, the setting apart of pine-bearing lands was enjoined, Guy Carleton, "Captain General and Governor-in-Chief of the Province of Quebec and all territories dependent thereon," receiving among other instructions, the following in relation to pine bearing lands.

"It is our will and pleasure, however, that no grant be made of any lands on which there is any considerable growth of white pines fit for masting for our Royal Navy, and which lie convenient for water carriage, but that you do cause all such lands to be set apart for our use, and proper Regulations made, and Penalties inflicted to prevent trespasses on such tracts, and the cutting down and destroying the trees growing thereon."

The Rules and Regulations for the conduct of the Land Office Department, issued in Quebec under date of February 17th, 1789, were based upon the same principle of preserving in the hands of the Crown, any tracts of land of a specially valuable character either by reason of their location or their natural products, and confining the grants made to individuals to ordinary agricultural lands. The following is the text of the regulations dealing with the subject:—

Minerals and Water Powers Reserved.

"And to prevent individuals from monopolizing such spots as contain mines, minerals, fossils, and conveniences for mills and other singular advantages of a common and public nature, to the prejudice of the general interest of the settlers, the Surveyor General and his agents or Deputy Surveyors in the different districts, shall confine themselves in the locations to be made by them upon certificates of the respective boards to such lands only as are fit for the common purposes of husbandry, and they shall reserve all other spots aforementioned together with all such as may be fit and useful for ports and harbors or works of defence, or such as contain valuable timber for shipbuilding or other purposes, conveniently situated for water carriage, in the hands of the Crown."

No approach was made to a license system, nor any arrangement made by which the public could receive any return for the privilege of cutting timber on the Crown domain for other purposes, than naval construction, until a considerably later date.

Naval Contract Abused.

Licenses to cut timber in the Canadian forests were granted by the Home Government to the contractors for the Royal Dockyards, who in addition to filling their contracts, took advantage of the privileges afforded them for that purpose, to do a general business in supplying the British markets. They carried on this profitable enterprise by issuing licenses to merchants and lumbermen in Canada who operated as their agents, as they were legally authorized to do. The Upper Canada Gazette contains the following notice of a Royal Warrant vesting in a firm of navy contractors the right to cut trees reserved to the Crown in Upper and Lower Canada, together with the appointment of a Canadian Mercantile house as their agents. which illustrates the working of the system.

An Extensive Timber Limit.

Council Chamber, 23 January, 1808.

Notice is hereby given by His Excellency, the Lieutenant-Governor-in-Council, to all whom it may concern, that His Majesty has been pleased to

issue His Royal Warrant in the words following: George R.

"Whereas, a Contract has been entered into by the principal Officers of His Majesty's Navy, with Messrs. Scott, Idles & Co., supplying His Majesty's dockyards in England and the West Indies, with Canada Masts and Oak Timber, and it being stipulated in the said contract that no Masts or Bowsprits which are cut in His Majesty's Colonies shall be delivered at the Dockyards unless they are cut by License from His Majesty's Surveyor of the Woods in North America, and also if it should be required, under the inspection of this Officer. Upon the representation of the matter to Us by the Commissioner for executing the Office of High Admiral of Our United Kingdom of Great Britain and Ireland, We have thought fit to give Leave, License and Permission unto the said Messrs. Scott, Idles & Co., their agents and workmen, to travel into and search Our Woods in Our Provinces of Upper and Lower Canada, where We have reserved to Us the property in any Woods or Trees, and the right of cutting them, and there to fell and cut so many good and sound trees as may answer the number and dimensions mentioned in the said contract (a copy whereof subscribed by one of

Our Principal Secretaries of State is hereunto annexed) and to carry the said trees through our said Woods to the water-side in order to the transporting and bringing them into our own stores without incurring any penalty

or forfeiture by reason thereof.

"And lastly; We do hereby require as well as Our Governor or Lieuten ant-Governor of Our said Colonies as you and all Our Officers, Ministers and Loving Subjects, whom it may concern, to be aiding and assisting to them, their Agents and Workmen, in whatever may relate to the due execution of this service, pursuant to the Contract above mentioned. And for so doing this shall be your warrant.

"Given at Our Court of St. James, the second day of October, 1807, in

the forty-seventh year of Our reign.

"By His Majesty's Command,

(Signed) "CASTLEREAGH.

"To our Truly and Well Beloved Sir John Wentworth, Baronet, Surveyor General of Our Woods on the Continent of America, or to his Deputy or Deputies, or to the said Surveyor General of Our said Woods, his Deputy or Deputies, for the time being, and all others whom it may concern."

Transfer of License.

"We, the undersigned contractors named in His Majesty's Gracious Warrant, do hereby appoint Messrs. Muir & Joliffe our agents at Quebec, for the purposes within mentioned.

(Signed) Scott, Idles & Co.

London, 9th October, 1807.

"His Excellency further gives notice, that a Contract has been made under the authority of the said Warrant with Messrs. Scott, Idles & Co., Merchants in London, who have appointed Messrs. Muir and Joliffe, Merchants at Quebec, to be their agents for the purposes therein mentioned, and that no irregularity may take place on the part of the said Contractors, their Agents or Workmen, His Excellency has thought proper to order the Deputy Surveyor General of the Woods to mark such White Pine Trees as come within His Majesty's orders expressed in the above Warrant.

By His Excellency's Command,

JOHN SMALL,

Clerk of the Executive Council."

Colonial Protection.

A great impetus was imparted to the development of the Canadian lumber industry by the financial policy of the Mother Country during the first quarter of a century. The imposition of heavy duties on foreign timber, levied in the first instance as a revenue measure to provide for the expenses of the French war, but afterwards retained with the avowed object of affording protection to colonial trade, caused a sudden and rapid expansion of the volume of timber importations from British North America.

Preferential Duties.

In the year 1787, when the trade was in its infancy, a general consolidation of the duties took place, the impost on foreign timber being fixed at 6s. 8d. per load of 50 cubic feet brought in by a British vessel, with an

addition of 2d. in case the shipment was made in a foreign vessel. In 1795 the financial strain, caused by the war, occasioned a substantial increase, and a series of additions took place during the following years, the details of which it is needless to specify, until in 1810, which marks the commencement of the protective era, the timber duty was placed at £21.4.8 per load in a British ship, and 2s. 8d. extra in a foreign vessel. The culmination was reached in 1813, when an addition of 25 per cent. all round on customs duties was imposed, making the timber duty £3.4.11, with an additional 3s. 2d. when carried under a foreign flag. A very slight re-adjustment took place in 1819, when the war duties, originally designed to be merely temporary, were consolidated with the permanent imposts. The system was again revised in 1821, and a considerable reduction was made; the duty on foreign timber being fixed at £2 15s. per load, with the addition of 2s. 9d. for the protection of the British carrying trade. Then for the first time a substantial duty, amounting to 10s. per load was imposed on colonial timher, which up to that time had been virtually free, and which still was accorded the protection of 45 shillings per load, as against the European product.

The effects of this policy were soon manifested in the falling off of importations from the Baltic and other European ports, which in the beginning of the century furnished nearly the whole of the timber shipped to Britain, and the corresponding increase of colonial production and exportation.

A Colonial Timber Boom.

An elaborate statistical table, showing the amount of timber consumed in the United Kingdom in each year between 1788 and 1833, with the quantities imported from the North American colonies and Europe respectively, was furnished to a Select Committee of the British House of Commons, appointed in 1835 to consider the question of timber duties. analysis of these figures shows conclusively the effect of the policy of the Imperial Government in encouraging the development of the Colonial timber industry, which had increased by leaps and bounds. During earlier stages of the period covered by this table, comparatively little change is noticeable in the relative volumes of the European and British North American traffic—the increase in duty not being sufficient to overcome the strong prejudice then widely entertained against Canadian as compared with Baltic timber, and to counterbalance the lower freight from European ports. The first noteworthy increase in the volume of the colonial importation was in 1803, when the number of loads brought in from British North America increased from 5,143 the figure at which it had stood the year previous to 12.133. The European importations for the same year amounted to 280,550 loads. The proportion of colonial timber steadily increased for some years, until in 1807 it reached 26,651 loads, as against 213,636 loads of the foreign product. The next year it had more than doubled, and in 1809 exceeded for the first time the European consignments, the figures being 90,829 and 54,260 loads respectively.

In 1811 the United Kingdom received timber shipments to the amount of 154,282 loads from British North America, and 124,765 loads from European ports. The war of 1812 caused a depression in the colonial trade, during which the foreign article took the lead until 1816, when the colonies supplied nearly twice the quantity furnished by Europe. The volume of British American importation rose from 153,707 loads in that year to 248,669 in 1818. The figures of the trade at this period, and some years

following, show not merely a large increase in the Canadian trade at the expense of the Baltic exporters, but a very steady and considerable augmentation in the total volume of timber consumption. In the five years, from 1819 to 1823 inclusive, the average annual importation from all sources was 452,158 loads, of which 166,600 came from Europe, and 335,556 from the colonies.

Heavy Exports.

The five years following, 1824 to 1828, average as follows:—Total importations of timber, 602,793 loads; European product, 191,890; colonies, 410,903. Notwithstanding that the duty on foreign timber had been reduced, and a small duty on the colonial product imposed in 1821, the expansion of the traffic continued unchecked, showing that very substantial differentiation of 45 shillings per load in favour of British America was sufficient vantage ground as against foreign competition, with cheaper freight rates.

Prejudice Overcome.

The British American trade had to make headway against the general but wholly unfounded prejudice, which for a long time prevailed in Britain with respect to the quality of the colonial growth. The evidence taken in the course of an enquiry into the timber trade by a Select Committee of the House of Lords in 1820, which resulted in the changes of duty effected the year following, brought out some strong expressions of opinion by timber experts as to the inferior grade and undesirable qualities of Canadian timber as regards strength and durability, which to-day would only excite ridicule on the part of any one conversant with the subject. Some of these utterances are worth while giving, as showing the inveteracy of prejudices born of ignorance and dislike of innovation, and the difficulties with which those who seek to divert trade into unaccustomed channels have to contend.

Exploded Theories.

Alexander Copland, a timber merchant and builder, when asked his opinion of the comparative qualities of timber employed, testified as follows: "The timber of the Baltic in general, speaking of Norway, Swedish. Russian and Prussian timber, is of very superior quality to that imported from America; the bulk of that is very inferior in quality, much softer in its nature, not so durable and very liable to dry rot; indeed, it is not allowed by any professional man under Government to be used, nor is it ever used in the best buildings in London. It is only speculators that are induced to use it, from the price of it being much lower than the Baltic timber; and if you were to lay two planks of American timber upon each other, in the course of a twelve month they would have the dry rot almost invariably to a certain extent; if you were to lav two Christiana deals in the same manner for ten years, there would not be the same appearance of it, so that there is something in its quality favorable to the dry rot, which prevents it being used in buildings except where there is a thorough air all around it." He went on to say in reply to other questions, that if the duties were reduced so that the Baltic timber could be sold for the same price as the American product, the latter would never be used except for some temporary purpose.

John White, another experienced timber merchant, gave evidence as regards the supposed liability of American timber to dry rot. "Of the American timber," he said, "we have generally estimated the red pine to

be the preferable, but I have had experience of it lately that induces me to form a very unfavorable opinion; where it has been put into green walls it has universally decayed. The soft or yellow pine timber (white pine) which has not apparently so good a character, when exposed to the air lasts very well; enclosed it is subject to rot. The pitch-pine timber, but which comes from the United States, as, indeed, does the red pine, is subject to decay from dry rot, if enclosed, and that very rapidly."

Many other expressions of opinion to the same effect could be quoted from the testimony taken during this investigation, showing how general at that time was the prejudice against American timber, on the ground of its supposed liability to decay more rapidly than the product of Northern Despite this general impression as to the inferiority of Canadian timber, the volume of importation, as the figures above quoted show, continued to increase enormously, its cheapness, as compared with the heavily taxed import from the Baltic region, being a strong incentive to its use. When once accorded fair trial, experience quickly proved its merits, and enquiry demonstrated that the notion of its unfitness for building purposes, owing to its special liability to dry rot, was partly due to incidental and preventable causes and partly to the fact that inferior grades of the colonial product had been taken as the standard of comparison with the best of the European timber. These points were clearly brought out in the lengthy and exhaustive investigation held by a Select Committee of the Imperial House of Commons in 1835, when the tone of the testimony given was much more favorable to British-American timber than that recorded fifteen years previously.

Baltic vs. Canadian.

One of the principal witnesses of the investigation of 1835 was Joseph R. Hume of the Board of Trade, who stated that a good deal of very cheap and inferior timber came in from the colonies, which was brought over by "seeking ships," and sold at very low prices. The high protective duty on the Baltic timber kept out the lower and cheaper grades, as it would not pay them to import them, and consequently the British consumer was only acquainted with the better qualities of European timber. A few extracts from the evidence of John Miller, ship-owner and timber importer of Livepool, given on this occasion, will illustrate the change of opinion in Britain as to the qualities of Canadian pine.

- Q. "Is it not the price of different articles which governs the consumption of the consumer?
 - A. Not so much as the quality of the article.
- Q. Do you mean to say that there would not be a different balance between the two articles [Colonial and Baltic timber], supposing there was no difference in the duties?
- A. I mean to say that, for a particular description of American pine, I could get 3d, to 4d, a foot more than for any Baltic, but that is but a small proportion of the import.

Q. For certain purposes, even though there were no duty on either timber, you think that certain better descriptions of American timber would

continue to be imported?

A. I know it for a fact. I know that now for the very timber of which I speak, as received in very small quantities, I can get a higher price than I can for any Baltic.

Q. When you spoke of a change of taste rather inclining in favor of the North American timber, did you not speak rather with reference to

your experience of the manufacturing district in your own neighborhood

than to the whole country?

A. I spoke more decidedly with reference to my own neighborhood, but I believe it to be applicable also to the port of London. I refer to the prices current, and the import of the port and consumption of the different articles, and I find that the consumption of colonial timber is growing very much upon that of the Baltic.

Q. Have you reason to believe from your intercourse with the leading builders in Lancashire, that the estimation of American timber is much

increasing?

A. No doubt of it.

Q. Can you state any facts upon the subject?

A. I can state the opinions I know to be entertained by other people. I know that Mr. Bellhouse, who is the largest dealer in Manchester, has changed the views he formerly entertained as to the comparative merits of the two timbers, and that he now gives a decided preference to the timber from the Colonies.

Q. For all purposes?

Red and White Pine.

A. For all purposes. He, in building large warehouses, has latterly consumed Canadian yellow pine in preference to Canadian red, Dantzic or Memel. He states, I think, that he consumes about 50 cargoes a year, and even when he can get lengths of Canadian red timber or Memel timber to suit the purpose, he uses in preference Canada yellow pine, and he states his reason that, for the last 15 years he has been a close observer of the different qualities of timber and the different effects produced upon it by exposure to the air and influence of atmosphere, and he finds that when you introduce the yellow pine of Canada into brick and mortar the ends are little liable to decay, and that the ends of either of the red pine timber from Canada, or of Memel and Dantzic timber, are more liable to decay.

Q. Does that extend to out-door window frames and such things?

A. We have long used the red pine timber from Canada for that purpose.

Q. Is it more durable when exposed to change of atmosphere?

A. In this country we have not a very great variation of climate, and I apprehend that either timber, if sufficiently exposed to the air will prove durable.

Q. Is not this opinion of Mr. Bellhouse the result of long experience,

and is it not a change from his former opinion?

A. Decidedly; and in Glasgow where I know at first they used for building purposes nothing but Baltic timber, this year, I wrote to Glasgow to a correspondent of my own, a large dealer in timber, to give me a statement of the proportion of each sort in consumption there, and he told me that the whole consumption in Glasgow of Baltic timber last year was not 200 loads."

Speaking of the views of timber experts given before the House of Lords Committee in 1820 Mr. Miller added: "I think they were under a injutake which time and further experience have rectified. I know the nature of the evidence adduced at that time and, so far as my own experience goes, almost every opinion there stated has proved to be wrong."

In short the history of the growth of progress of the Canadian timber export trade to Great Britain is simply a repetition of the familiar story of unreasoning and prejudiced opposition to every new departure from the

old established channels of commerce and industry, yielding, gradually but surely, as the innovation succeeds in justifying itself by the test of practical experience. Sooner or later, the timber resources of Canada would have found a market in Britain under any circumstances, but there is no doubt that the financial policy, which, by imposing higher duties on the Baltic timber, gave the colonial product such great advantage in cheapness to the consumers, greatly hastened the period of its introduction for building purposes. Once established firmly in popular appreciation it maintained its ground in spite of the changes in fiscal policy, which deprived it of these factitious advantages.

Duty Reduced.

In 1842 the duty was reduced to 25s, per load on foreign, and 1s, on colonial timber, without resulting in any permanent diminution in the volume of importations from British North America. The great Free Trade movement which resulted in the repeal of the corn laws in 1846 witnessed a further reduction in the foreign timber duties and the total abrogation of the hardly more than nominal impost on the Canadian product.

Gladstone.

In a despatch sent by the Right Hon. W. E. Gladstone, then Colonial Secretary, under date of March 3rd, 1846, to Earl Catheart, Governor of Canada, announcing the change of policy, the following references to the timber trade of the colonies with Britain occur:—"I have much satisfaction in drawing your Lordship's attention to the fact, that the colonial timber trade prospers under the operation of these changes in the laws which were enacted in 1842, and which had taken full effect before the end of 1843. The increased facilities of internal transit in this country, independently of the very great temporary demand connected with the construction of the railways, that are to effect this great improvement, promise a considerable and permanent extension of the market for foreign woods, an extension likely to be accelerated, unless it be as to Scotland. by the progressive diminution of the home growth of timber through the United Kingdom.

"The description of wood which is supplied by the British North American colonies, the yellow pine, is not chiefly to be regarded as competing with the wood of the Baltic, but rather as available for different though concurrent uses. For example, the increase of Baltic timber, tending to encourage the construction of new buildings by supplying the best materials for particular portions of them, has an effect not in limiting but in extending the demand for Canadian timber, as furnishing the cheapest and most convenient material for other portions, namely, the inward fittings of the very same fabrics.

Duty to Equalize Freights.

"Her Majesty's Government are not indeed prepared to assert that the question of the relation between the duty on foreign timber and the colonial wood trade ought to be adjusted with reference to this consideration alone, and you will perceive that they propose to retain a duty of 15s, per load upon foreign timber, which I apprehend may be considered as, upon the average, nearly covering the difference between freights from the Baltic and those from British North America to the United Kingdom. Not only

are they free from the apprehension that the proposed remission of 10s. per load on foreign timber and 12s. on foreign deals, will cause a contraction of the trade from British North America; but they are sanguine in the anticipation that that trade will continue, notwithstanding the proposed change, to extend itself."

Trade with U.S.

Mr. Gladstone's forecast proved correct and the importation of timber from the British North American colonies continued to increase in volume after the last vestige of protection had disappeared, notwithstanding the advantage enjoyed by the Baltic shippers in proximity to the British market and consequent low freight rates. According to the Canadian trade and navigation returns, the exports of forest products of all descriptions to Great Britain for 1850 amounted in value to £971,375 Canadian currency. Four years later this figure was more than doubled, and in 1857 it stood at This steady augmentation of the timber shipments to the £2,044,178. mother country was moreover proceeding simultaneously with the rapid development of the trade in forest products with the United States, stimulated by the settlement of the scantily timbered or treeless areas of the West-In the year preceding Confederation, that ending June 30th, 1867, the American demand stood as nearly as may be on a par with that of the British Islands, the value of forest produce shipped over the boundary line being \$6,831,252, as compared with exports valued at \$6,889,783 which found a market in Britain.

In order to present a clear and connected view of the rise and progress of the timber trade with Great Britain, it has been requisite to note the consecutive phases of British Legislation which contributed so largely to its growth, somewhat out of their chronological order in relation to Canadian development, to which it is now necessary to revert.

First Canadian Timber Laws.

The earliest enactment of a Canadian Legislature bearing on the timber trade was adopted in Lower Canada in 1805, with the object of preventing accidents in navigating the formidable rapids of the St. Lawrence, which owing to the increased quantities of lumber and timber forwarded to Montreal by this route had become frequent. As it formed the precedent for much subsequent legislation dealing with the same question it may be well to present it in extenso.

"An Act for the appointment of an Inspector and Measurers of Scows and Rafts, and for regulating the pilots and conductors thereof between

Chateauguay and the City of Montreal. (25th March, 1805.)

First Timber Measurer.

"Whereas, many accidents and considerable loss of property have arisen in the rapids of the River St. Lawrence above the City of Montreal partly by the ignorance or negligence of persons undertaking to pilot and conduct scows, loaded with flour and other provisions, also, oak, timber, staves, and other lumber coming from Upper Canada, and firewood from different parts of this Province, above the said rapids, and it being necessary that the regulations be made to guard as much as possible against such accidents and losses, in future. Be it therefore enacted by the King's most Excellent Majesty, by and with the consent of the Legislative Coun-

cil and Assembly of the Province of Lower Canada, constituted and assembled by virtue of and under the authority of an Act passed in the Parliament of Great Britain, entitled "An Act to repeal certain parts of an Act passed in the Fourteenth Year of His Majesty's reign intituled: "An Act for making more effectual provision for the Government of the Province of Quebec in North America," and to make further provision for the Government of the said Province," and it is hereby enacted by the authority of the same, that it shall and may be lawful for the Governor, or Lieutenant-Governor, or person administering the Government for the time being; by an instrument under his hand and seal at arms to nominate and appoint one discreet and intelligent person resident in the Parish of Chateauguay, to be Inspector, and two others so residing to be Measurers of scows and rafts of timber and lumber, as also of firewood, and from time to time the said Inspector and Measurers, or either of them, to remove, and also in case of death and resignation, another, or others being resident in the said Parish of Chateauguay, to nominate and appoint in his or their place and stead.

2. And be it further enacted by the authority aforesaid, that it shall be the duty of the Inspector and Measurers to keep themselves informed of the state of the water in the rapids between Chateauguay and Montreal, and in consequence from time to time, as often as in their judgment need be to determine what depth of water scows and rafts respectively may draw, to pass through the said rapids in safety, of which depth the said Inspector shall at every such time make a record in a book to be kept by him for that purpose, and the applicant for the measurement of scows and rafts, shall have access thereto, without fee; and the said Inspector upon application to him shall proceed himself, or send one of the Measurers, to take the depth of water which each scow or raft then intended to be conveyed through the rapids draws, and shall brand such draught of water thereupon. vided that, before any scow or raft shall be so branded, it shall be lightened (if exceeding the same) to the draught of water so determined upon, as the measure of safety, and if the said Inspector and Measurer, or one of them, shall not in a reasonable time proceed to measure any scow or raft, as to the depth of water it draws when applied to for that purpose, or shall refuse or omit to brand the same, when drawing or lightened to draw a depth of water, not exceeding that upon record for the time, or shall brand a scow or raft which exceeds such depth upon record, the Inspector or Measurer so offending, shall forfeit and pay for every such offence, a sum not exceeding forty shillings current money of this Province.

Licensed Pilots.

3. And for the greater safety of property which may be committed to the care of Pilots undertaking for hire to conduct scows and rafts from Chateauguay to Montreal: be it further enacted that every person intending to act as a Pilot in any such case shall annually take out a license to authorize him to practice for hire the piloting and conducting of scows and rafts from Chateauguay to Montreal, aforesaid which license the Justices of Peace for the District of Montreal, in their weekly sittings, or any special session to be held in the said city, are hereby authorized and required, on the recommendation of the Inspector, or any one of the Measurers (if no good reason be shown to the contrary) to grant to the person applying for the same on paying to the Clerk for such license, two shillings and sixpence currency, and no more: and the said Clerk is hereby required to keep a register of the names of the persons who shall be so licensed. Provided always that if any person applying for such a recommendation shall be refused the

same, such person shall be allowed to adduce before such Justices, proof of his capacity to discharge the duties of a Pilot, upon which and after hearing the Inspector or a Measurer, in support of the reasons for such refusal, the said Justices shall grant or withhold a license as they shall see most

conducive to the purposes of this Act.

4. And be it further enacted by the authority aforesaid, that if any Pilot having charge of any scow or raft, shall leave Chateauguay to proceed through the rapids to Montreal, before the same shall have been measured as to the depth of water which such scow or raft then draws, and branded as hereinbefore directed, every such Pilot shall for every such offence forfeit and pay a sum not exceeding forty shillings current money of this Province.

5. And be it further enacted by the authority aforesaid, that if any person not being a Licensed Pilot as aforesaid, shall, for hire or payment of any wages, undertake to conduct or pilot through the rapids from Chateauguay to Montreal, any scow, loaded in part or in whole, or any raft of oak timber or staves, or other lumber or firewood, every person so offending shall for every such offence, forfeit and pay a fine not exceeding forty shillings current money of this Province.

Owner may Act as Pilot.

6. Provided, always, and be it further enacted by the authority aforesaid that nothing in this Act contained, shall extend, or be construed to extend, to prevent any person or persons from conducting and piloting from Chateauguay to Montreal any raft or rafts of firewood, which is or are his or their property, but this shall not exempt any such proprietor from first causing such raft or rafts of firewood to be measured and branded as by this Act is directed; and in default of being so measured and branded, every such proprietor shall forfeit and pay a sum not exceeding ten shillings current money of this Province.

Pilots Fees.

7. And it being necessary to fix the hire or wages of Pilots licensed as by this Act is directed. Be it further enacted by the authority aforesaid, that from the opening of the navigation until the first day of October, annually, there shall be paid to the licensed Pilots in lieu of all wages, provisions and ferriage for piloting from Chateauguay to Montreal the following hire or wages, that is to say: For every scow loaded in part or in whole, thirty shillings, currency. For every raft of staves, timber or other lumber consisting of two cribs, and not exceeding eighty feet in length, twelve shillings and sixpence, currency. For a single crib of staves, timber or other lumber, if the proprietor shall require it to be piloted singly, twelve shillings and sixpence, currency. For every raft of firewood, ten shillings, currency. And from and after the first day of October, inclusive, annually until the close of navigation there shall be allowed and paid over and above the before mentioned rates an addition of one-fifth part.

In Case of Accidents.

8. And, whereas, accidents may happen to scows and rafts in their passage from Chatcauguay to Montreal. Be it further enacted by the authority aforesaid that it shall be the duty of the pilot having charge of any scow or raft, which shall meet with an accident, to give every assistance in his power, not only to clear the rapids from the impediments which such

accident may occasion, but further to the best of his skill and abilities, to assist in endeavoring to save from loss, the loading of any such scow or raft so meeting with an accident, nor shall he depart or leave the same until discharged by the owner thereof or his agent, under the penalty of the loss of his wages; and, further, a fine not exceeding twenty shillings currency for every such offence. Provided always that over and above the allowance for pilotage to such Pilots as hereinbefore established, there shall be paid to him, for every day that he shall be detained in so clearing the rapids, or in assisting to save the property committed to his charge, the wages following, that is to say: from the opening of navigation until the first day of October, five shillings currency per day, and from the first day of October inclusive, until the close of the navigation, one-fifth more, and

in both cases of such detention provisions whilst so employed.

9. And be it further enacted by the authority aforesaid, that it shall be the duty of a Licensed Pilot upon being thereunto required by the Inspector, or either of the Measurers to take charge of any scow or raft, which shall have been gauged and branded, and if any such Pilot shall after such requisition refuse or neglect to take charge thereof, and shall a second time after a like requisition, the same not being made the same day, and the Pilot so required not being then actually engaged to conduct any other scow or raft, nor being incapable from sickness to do his duty, still refuse or neglect to take charge of a scow or raft so gauged and branded, every such pilot so refusing and neglecting a second time shall, upon conviction thereof, forfeit and pay a sum not exceeding twenty shillings currency, and be deprived of his license for the remainder of that season; and if any Pilot so convicted shall nevertheless afterwards presume to pilot any scow or raft, during that season, he shall forfeit and pay a sum not exceeding forty shillings currency.

Inspector's Fees.

10. And be it further enacted by the authority aforesaid, that for the trouble of inspecting, measuring and branding of every scow, crib, or raft, as hereinbefore directed, there shall be paid into the hands of the Inspector the following rates and allowances, that is to say: For every scow loaden in part or in whole, six shillings curency. For every crib of staves, timber or other lumber, two shillings and sixpence currency. For every raft of firewood, one shilling and three pence currency. And for every crib or raft with wheat, flour or other provisions, or pot or pearl ashes thereon, two shillings and sixpence currency. And the monies so received by the Inspector shall be divided and paid as follows, that is to say: two-fifth parts to be retained for himself, and the other three-fifths to the Measurers by equal portions.

Penalty for Non-Payment.

11. And be it further enacted by the authority aforesaid, that all fines and penalties by this Act inflicted, unless otherwise provided for, be sued for within three calendar months after an offence committed, and not afterwards, before any one or more Justices of the Peace in the District, who is and are hereby authorized to hear and determine the same, and on conviction of the offender, by his or her confession, or by the oath of one or more credible witness or witnesses, being other than the prosecutor, the same shall be levied with costs of suit, by warrant of distress, under the hand and seal of such Justice or Justices of the Peace, of the goods and chattels of the person so convicted and one-half of such fines and penalties shall be paid to the prosecutor, and the other half shall be paid into the hands of His Majesty's Receiver General of this Province, to be applied to the public uses thereof; and the same shall be accounted for to His Majesty, his Heirs and Successors, through the Lords Commissioners of His Majesty's Treasury, in such manner and form as His Majesty, his heirs and successors shall direct.

12. And be it further enacted by the authority aforesaid, that if any suit be brought against any person for anything done or executed, by virtue of and in pursuance of this Act, such suit shall be commenced within three months after the matter or thing done, and not afterwards; and the defendant or defendants may plead the general issue, and give this Act and the special matter in evidence, on any trial to be had thereon, and that the same was done in pursuance of and under the authority of this Act, and if judgment shall be given for the defendant or defendants, or the plaintiff or plaintiffs shall become non-suited, or shall discontinue his, her or their prosecution, after the defendant or defendants shall have appeared, then such defendant or defendants may and shall recover treble costs, and have the like remedy for the same as any defendant or defendants hath or have to recover costs in cases at law.

13. And be it further enacted, by the authority aforesaid, that this Act shall continue and be in force until the first of January, one thousand eight hundred and eight, and from thence to the end of the then next session of

the Provincial Parliament and no longer."

In 1808 the Act, having been found beneficial in its effects, was made perpetual with some amendments. Scows were exempted from its operations and those in charge of such vessels allowed to make their own arrangements with licensed pilots in place of being subject to a fixed tariff of fees.

Timber Returns.

Persons in charge of rafts or cribs of timber were authorized to employ such licensed pilots as they saw fit, the latter, in case of refusal or neglect of duty, being liable to the same penalties as though engaged by the Inspector or Measurer. The Inspector's duties were somewhat extended and he was required to make an annual return to the Commissioner of Inland Navigation of the number and as far as possible the contents of the scows, rafts and cribs passing during the season.

Improvement Tax.

By another Act passed the same year entitled "An Act to provide a permanent Fund for the Improvement of the Inland Navigation of the River St. Lawrence," rates were levied upon all scows, rafts and cribs passing through the rapids between Chateauguay and Montreal, to be paid to the Inspector of scows and rafts at Chateauguay and applied to the improvement of inland navigation. The rates were as follows: Every scow, fifteen shillings; every crib containing lumber, 7 shillings and sixpence. A more important measure as affecting the timber industry, also adopted in 1808, was the "Act for the better Regulation of the Lumber Trade." "Whereas," it begins, "lumber is become an article of importance in the export trade of this Province, and it would tend to increase its growing reputation to the great advantage of trade, if the quality and measurement thereof were properly ascertained." It was provided that no lumber of the description specified in the Act should be exported until it had been culled,

measured and certified as to quality. The Governor was authorized to appoint persons at the ports of Quebec and Montreal as Master Cullers and measurers of board and plank, staves, timber, masts and spars respectively, as well as at other places in the Province if it should be thought desirable.

Lumber Cullers.

The same person may be appointed Master Culler of more than one of the descriptions of lumber specified. The duty of these officials was personally or by deputy to ascertain the quality and dimensions of the article submitted to their inspection, to reject such as were in any respect defective according to the definitions laid down in the Act, and give a true and faithful account in writing of the number; quality and dimensions of the articles found to be merchantable, which was to be final and conclusive between buyer and seller. Those engaged in the lumber trade were authorized to retain in their exclusive service master cullers and measurers specially licensed, but in such case those delivering lumber to them had the right to object to the culler and insist upon inspection by a public official.

The Act proceeded to define the standard which should determine the mercantile quality of lumber in the absence of any specific agreement between buyer and seller. Those relating to some of the more important

staples were as follows:

Timber Standards.

"Square oak timber shall not be less than twenty feet in length and ten inches square for measurement, and shall be free from rot, rings, shakes and other defects, properly squared and butted. Square pine timber shall not be less than twenty feet in length, and not less than twelve inches square for measurement, and shall be free from rot, bad knots, shakes, and other defects, and properly squared and butted; Pine boards shall not be less than ten feet in length, and not less than eight inches in breadth, equally broad from end to end, edged by the saw or neatly trimmed by a straight line, free from rot, sap stains, bad knots, rents and shakes, and of an equal thickness on both sides from end to end. Pine plank shall not be less than ten feet long, nor less than six inches in breadth, equally broad from end to end, edged by the saw or neatly trimmed by a straight line, free from rot, sap stains, bad knots, rents, and shakes, and an equal thickness on both sides from end to end."

Timber Brands.

Provision was made for the stamping of all timber and lumber inspected and found up to the standard of merchantable articles, with the letter "M." Persons shipping timber of any description for exportation which had not previously been culled and measured were liable to a penalty not exceeding £100 and not less than £10, and Justices of the Peace were authorized to issue warrants for the seizure of such lumber on the information of any culler or measurer or any other person.

Seconds.

The Act appears to be somewhat loosely drawn, and to be encumbered with provisoes, which must greatly have interfered with its effectiveness. The first section comprises the following: "Provided also that nothing contained in this Act shall be construed to prevent the shipment of any article

of lumber, nowithstanding such articles may not be of the dimensions hereinafter provided, if the same be of sound and good quality, and marked or certified as such, by one of the Inspectors, to be appointed by virtue of this Act. Provided further, that whereas pine timber, pine plank, pine boards of an inferior or second quality were heretofore imported from the countries bordering on the Baltic into Great Britain and Ireland, and continue to be saleable and useful for particular purposes; nothing in this Act contained shall extend or be construed to extend or prohibit the exportation from this Province of any such pine timber, or pine boards of an inferior or second quality."

It is not at all clear whether the cullers or measurers were required to apply any standard whatever to this second quality lumber, excepting such as might be demanded by the contract between buyer and seller, by which they were in all cases to be governed when such existed. The standards for "merchantable" timber were only to be applied "in all cases where there is no specific agreement between the buyer and seller."

It may fairly be concluded, therefore, that all the Act did, or was intended to do, was to provide a safeguard for those purchasers who desired a superior grade, while practically placing little or no check upon the exportation of lumber of a poor quality provided that it were distinguishable as such.

The Act contains some further provisions as to the salvage of timber adrift in the rivers, and imposing penalties upon those appropriating such timber to their own use, or wilfully setting timber adrift, into the details of which it is unnecessary to enter.

Cullers not to Trade.

This Act, which was to remain in force for only two years, was reenacted in 1811 with some changes. The section authorizing dealers to retain licensed cullers in their exclusive service was abrogated, and an amendment adopted prohibiting Master Cullers and Measurers from trading in timber under penalty of dismissal from office and a heavy fine. This Act, like the former, was to remain in effect only for two years. tinuing legislation was enacted from time to time until 1819, when the existing enactments were repealed and a new Act adopted, based upon the original law in most of its details, but somewhat more stringent and comprehensive in its provisions. All existing licenses to cullers and measurers were cancelled, and it was provided that no persons other than those who had previously held licenses should be commissioned to act in that capacity thereafter, without having passed an examination as to their qualifications before a Board to be appointed by the Governor. The standard for merchantable lumber was raised by a more detailed specification of the defects to be considered as disqualifications, and the list of descriptions of lumber subject to inspection was considerably amplified.

Cullers and measurers, as before, were to be governed by the contract between the buyer and seller as regards the dimensions and descriptions of the article submitted to their inspection, and the very elaborate and rigid definitions of what constituted "merchantable" timber were only applicable where no specific agreement between the parties existed. The measure in fact presents the same problem of confusing and contradictory provisions as characterized the first legislation on the subject. As in the Act of 1808, the section prohibiting the exportation of any lumber not culled, measured and certified to possess the requisite qualities of excellence specified, was

modified by the proviso that nothing should be construed to prevent the exportation of timber, plank and boards "of any inferior or second quality," with the addition of the clause—"provided the quality thereof be declared in the cocket and manifest accompanying the same by the ships."

Ineffectual Legislation.

At the same time the provision for the seizure of lumber shipped for exportation without having been culled, stamped and marked, was included in the Act of 1819, and another section rendered it penal for the Master or Owner of a vessel to receive on board unstamped lumber. As there is no mention of any intermediate grading or provision for other branding than as "merchantable" or "rejected" the duties of the cullers, as regards inferior qualities of lumber, appear to have been left very badly defined, and the whole question as to the rights and liabilities of exporters in the matter in an extremely chaotic condition so far as the wording of the Act was concerned, though no doubt the custom of the trade furnished a working basis for the system despite these apparent incongruities.

The Act of 1819 was kept in force until 1823, when some amendments were made, and renewed again in 1825, expiring two years later. In 1829 a fresh enactment was made by the Legislature of Lower Canada, much along the lines of the previous laws, but more explicit in its terms, as the whole matter was placed beyond question upon a voluntary or permissive basis.

All the prohibitions as to the shipment of uninspected lumber were omitted, and it was distinctly provided that "nothing contained in this Act shall prevent or be construed to prevent, the shipping or the exportation of any lumber or timber of an inferior quality or size, or without inspection where or when the shipper or exporter shall think proper, to ship or export any such lumber or timber." After being renewed in 1832 it was permitted to expire by the lapse of the term for which it was revived in 1834.

Supervisor of Cullers.

There was no further legislation affecting the lumber trade by the Province of Lower Canada, but after the union of the Provinces in 1840 the Parliament of Canada undertook to deal with the subject. A measure was passed in 1842, by which the Mayor of Quebec was authorized to appoint a Supervisor of Cullers, and the Board of Trade of the same city to appoint a Board of Examiners, by whom all cullers' licenses were to be granted. The inspection of lumber for home consumption was left entirely optional. As regards exportation, the Act provided that no person, being the owner of mills at which deals were manufactured, should be required to cause such deals to be measured, if exported by such manufacturer on his own account, but with that exception, no lumber should be exported without being measured, under a penalty of one penny currency for each cubic foot, or one shilling for each separate piece of lumber so shipped. The Act was to remain in force until the year 1847, but in 1843 it was repealed as being insufficient to accomplish the object in view, and a more stringent measure enacted in its place. The appointment of the Supervisor of Cullers was taken out of the hands of the Mayor of Quebec and vested in the Governor, that of the Board of Examiners being entrusted to the Council of the Quebec Board of Trade. Cullers' licenses were to be issued by the Government on the presentation of a certificate of fitness from the Board of Examiners. Following the principle laid down in several previous Acts, the culler was

required to mark the dimensions of all square timber, and, if requested by the seller or buyer, to stamp every piece of lumber according to quality, the letter "M" indicating what was merchantable, "U" what was sound and of good quality, but under merchantable size, and "R" rejected and unmerchantable.

This measure was repealed in 1845 when the enactment which replaced it established for the first time the system of grading timber in accordance with its quality. Second and third quality standards were adopted both for

timber and deals.

The standards for merchantable timber were set out with greater pre-

cision and fullness of detail than before.

It was provided that square timber should be measured in accordance with some one of the following modes:—

1. In the raft or otherwise, giving the full cubic contents without any

allowance or deduction.

2. In shipping order, which should mean sound, fairly made timber, or,

3. Culled or measured in a merchantable state in accord with the

standards prescribed.

The position of the export trade with respect to culling and measuring was thus defined:—"Nothing in this Act contained shall be held or construed to make it compulsory for any article of timber to be measured, culled or assorted, under the provisions of this Act, provided that such lumber be shipped for exportation by sea for account (in good faith) of the actual and bona fide producer or manufacturer thereof; but all other lumber shipped for exportation by sea shall be either culled, measured or counted (at the option of parties) by a licensed culler, under the control and superintendence of the Supervisor, under a penalty equal to the market value of any article of lumber so illegally shipped." It was provided that the Act should not extend to any place below the eastern end of the Island of Orleans.

Upper Canada Customs Duties.

There was no similar legislation in Upper Canada, or any measure on the Statute Books of that Province directly bearing upon the lumber industry until 1819, when duties were imposed upon a number of specified articles imported from the United States. Forest products were not included in the list, but it was provided by a general clause that upon all unenumerated goods, the growth, produce or manufacture of the United States, an valorem duty of 5 per cent. should be levied, with certain specific exceptions, which included staves and headings. A further clause provided "that nothing in this Act contained shall extend or be construed to extend to prohibit the admission of flour, oak, pine, and fir timber into this Province free of duty, for exportation only." At this time a good deal of lumber was imported into the Provinces from the United States, and reshipped from Quebec to the British market, so as to obtain the advantage of the preferential tariff in favor of the Colonies. The extent of this trade attracted the attention of the British Authorities who evidently had no intention that the privileges granted to the Canadian exporter should cover the timber supplies brought into Canada from the United States. In 1820 an official enquiry was instituted. An official statement, made as a return to an address of the House of Commons, showed that the timber imported into Lower Canada from Lake Champlain via the Port of St. John's, from the year 1800 to 1820, included 10,997,580 feet of red and white pine timber, 3,935,443 feet of oak timber, 34,573,853 feet of pine plank, and 9,213,827 feet of pine

boards. The result was that in 1822 an Imperial Act was passed to regulate the trade of the Provinces of Upper and Lower Canada, by which duties were imposed upon lumber and timber imported from the United States, as follows:—

Imperial Duties.

2 map of out 22 masses.	Sterling.		
Every 1,000 shingles not more than 12 inches in length.	£0	7	Û
Every 1,000 shingles more than 12 inches in length	. 0	14	0
Every 1,000 red oak staves			
Every 1,000 white oak staves or headings			
Every 1,000 feet white or yellow pine lumber of one-			
inch thick	1	1	0
Every 1,000 feet of pitch pine lumber	. 1	1	0
Other kinds of wood and lumber per 1,000 feet	. 1	8	0
Every 1,000 wood hoops	. 0	5	3

By a subsequent Act three years later this tariff was continued with

some important changes.

The policy of the Imperial Government with regard to the maintenance of permanent timber reserves, which was laid down in the instructions given to the earlier Governors of Quebec, from which extracts have been given, was steadily kept in view after the separation of the Provinces. The elaborate instructions received by the Duke of Richmond, Governor-in-Chief of the Province of Upper Canada, dated May 9th, 1818, comprise the following directions as to the system to pursue in surveying and granting land, with the object of retaining in the hands of the Crown the more valuable timber producing tracts.

Reserves. Pine Lands not to be Sold.

35. "Whereas the reserving of such bodies of land within Our Province of Upper Canada, where there are considerable growths of timber fit for the use of Our Royal Navy is a matter of the utmost importance to Our Service; it is Our Will and pleasure that no grant whatever be made in lands in any district or tract of Our said Province of Upper Canada until our Surveyor General or his Deputy, lawfully appointed, shall have surveyed the same and marked out as reservations to Us, Our heirs and successors, such parts thereof as shall be found to contain any considerable growth of masting or other timber fit for the use of our Royal Navy, and more especially on the rivers; and you are hereby instructed to direct Our Surveyor General of Lands in Our said Province, from time to time with all due diligence to complete the surveys and mark out the reservations as aforesaid, in the most convenient parts of Our said Province; and you are from time to time to report the manner, extent and situation of such reservations; and you are further directed to direct Our Surveyor General not to certify any plots of ground ordered and surveyed for any person or persons in order that grants may be made out for the same, until it shall appear to him by certificate under the hand of Our Surveyor General of Woods, or his deputy, that the land so to be granted is not part of nor included in, any district marked out as a reservation for Us, Our heirs, and successors, as aforesaid for the purpose hereinbefore mentioned; and in order to prevent any deceit or fraud being committed by the persons applying for land in this respect, it is Our will and pleasure that in all grants to be hereafter made for lands within Our said Province of Upper Canada, the following proviso and exceptions be inserted—that is to say—"And provided also that no part of the parcel or tract of land hereby granted to the said and his heirs, be within any reservation heretofore made and marked out for Us, Our heirs and successors by Our Surveyor General of Woods, or his lawful deputy, in which case this Our grant for such part of land hereby given and granted to the said and his heirs forever as aforesaid, and which shall, upon a survey thereof being made, be found within any such reservation, shall be null and void and of none effect, anything herein contained to the contrary notwithstanding."

PROVINCIAL REVENUE FROM FORESTS.

The earliest step towards making the forest resources of the Province a source of revenue and so securing to the public a share of the wealth drawn from the public domain was taken in 1826. Previous to this date, as has already been mentioned, the only persons authorized to cut timber on the public lands were the contractors for the Royal Navy, or those holding licenses from them. It is hardly surprising that this monopoly, from which the people derived no benefit, was continually infringed upon by unlicensed lumbermen, who pursued a very active and profitable illicit trade, despite all attempts of the officials to suppress it. The manifest unfairness of the system, both to the general public and to the persons desiring to engage in lumbering, but debarred from doing so in a legitimate manner, led to the termination of the contractors' monopoly, and the inauguration of a system under which any one was at liberty to cut timber on the ungranted lands of the Ottawa lumber region, on payment of a fixed scale of rates to the Crown. The following Proclamation, issued by Sir Peregrine Maitland, Lieutenant-Governor of Upper Canada, announced this important change:--

UPPER CANADA.

P. MAITLAND,

Lieutenant-Governor.

George the Fourth by the Grace of God, of the United Kingdom of Great Britain and Ireland, King, Defender of the Faith.

To all to whom these presents shall come Greeting:

Whereas for the more effectually preventing the recurrence of such abuses as have heretofore prevailed in the prosecution of the trade in timber in the parts of this Province, bordering on the River Ottawa, and to the end that the public interest may be more certainly advanced, the commerce in that important article of exportation the better regulated, and more equal justice observed with regard to all our subjects desirous of participating in the said trade;

We have thought fit to order and direct that, until our pleasure herein be further made known it shall and may be lawful for all our subjects inhabiting our Provinces of Upper and Lower Canada, freely to enter into our woods and forests in such parts of our said Province of Upper Canada, situated along the banks of the River Ottawa, or upon the banks of the waters running into the said river, and a convenient distance from the same, as shall not have been surveyed and divided into concessions and lots, and to cut and carry away such oak and pine timber as may be fit for the purpose of exportation.

Timber Dues.

Provided always nevertheless, that in the consideration of the authority and permission hereby given, the several rates and duties hereinafter specified, shall be paid to Us, our Heirs and Successors, (that is to say) upon every thousand feet of oak timber, the sum of six pounds and five shillings, being at the rate of one penny, half penny per foot. Upon every thousand feet of red pine timber, four pounds three shillings and four-pence, being at the rate of one penny per foot. Upon every thousand feet of yellow pine timber two pounds one shilling and eightpence being at the rate of half penny per foot. Upon saw logs of the proper length to be cut into deals, twopence upon each log. And upon every thousand of standard staves, four pounds one shilling and eightpence, which duties are to be paid in lawful money of our said Province of Upper Canada, and to be levied and received by such persons as We shall for that purpose appoint by Commission under the Great Seal of Our said Province; and at such place or places on the said River Ottawa as we shall declare through our officer to be appointed as aforesaid to be most fitting and convenient.

Diameter Limit.

Provided always, that for the better preventing the said timber being cut before it has attained a suitable growth, double the amount of duty herein specified shall be charged upon all such timber as shall not square more than eight inches. And it is further our Will and Pleasure that all such timber or wood which shall have been cut as aforesaid upon our unconceded lands in Upper Canada, upon which the duties shall not be paid, when exacted by Our Officer so to be appointed as aforesaid, shall be seized and detained to Our use as forfeited.

Old Licenses Exempt.

Provided always, nevertheless, that all persons properly authorized by or under Our license granted in manner heretofore used to cut timber in Our said Province, shall be permitted to carry away and export the same, to such extent as their licenses may specify, without the exaction of any rate hereby imposed, and that all such timber as may have been heretofore cut upon Our unconceded lands as aforesaid, without Our express license, may upon payment of the duties hereby specified, be suffered to pass through Our said Province of Upper Canada.

In testimony whereof, We have caused these Our letters to be made patent, and the Great Seal of Our said Province to be herein affixed. Witness Our trusty and well beloved Sir Peregrine Maitland, K.C.B., Lieutenant-Governor of Our said Province, and Major General commanding Our forces therein at York, this third day of May in the year of Our Lord one thousand eight hundred and twenty-six, and in the seventh year of Our

Reign.

P.M.

By His Excellency's Command, J. B. Robinson, Attorney-General. D. Cameron, Secretary.

The following year Peter Robinson was appointed by the Royal Commission Surveyor General of Woods and Forests in the Province of Upper Canada, and received detailed instructions from the Commissioners of the

Treasury as to the course to be pursued in dealing with the timber on the Crown Lands.

He was directed to make a survey of the woods and forests of the Province in order to ascertain in what districts there might be any considerable growth of masting or other timber fit for use of the navy; and also in what districts there might be any considerable quantity of other descriptions of timber. Evidently the Commissioners of His Majesty's Treasury, in cutting out Mr. Robinson's work on this extensive scale, had but a hazy idea of the Canada of 1827. After further instructing the Surveyor General to issue certificates whenever required by the Governor General or Commissioner of Crown Lands stating whether any lot or lots proposed to be sold contained any considerable timber fit either for naval or other purposes, the following directions as to the granting of timber licenses were given.

Provincial Timber Licenses.

"And, whereas, much of the timber standing and growing on the waste and ungranted lands within the said Province may not be fit and proper for the use of His Majesty's Navy, and it may be expedient that permission should be granted to His Majesty's subjects to fell the same: We do therefore require and enjoin you that you do in the month of May, in each year, make a report to the Governor or Officer administering the Government, stating the districts in which it may appear to you advisable that Licenses should be granted to such of His Majesty's subjects as may be desirous of cutting timber not fit for His Majesty's Navy, specifying the quantities which, in your judgment, may be fit to cut in each district, and the quantities for which you would recommend that licenses should be granted in the then ensuing season."

Upon the Governor signifying his approval of the granting of licenses in the districts indicated by the Surveyor General the licenses were to be disposed of by public auction after due notice by advertisement in the York Gazette and some other newspaper circulating in the Province. Each license was to be for a quantity not exceeding 2,000 feet with upset prices

's follows:

Oak, per 1,000 feet	£4	3	4
Ash, elm, beech, per 1,000 feet	2	10	0
Red pine, per 1,000 feet	3	0	0
White pine, per 1,000 feet			
Staves, per standard 1,000	1	0	0
Handspikes, standard 1,000	1	0	0
West Indian staves and other timber, per 1,000 ft.	1	0	0

Time Limit.

The conditions of these licenses were such that the timber should be cut within nine months, otherwise the license to be void. Purchasers were required to pay for the timber cut within fifteen months from the date of license and one or more measurers of timber were to be appointed in each district to certify as to the quantity of timber cut. The Surveyor General was authorized to incur contingent expenses on the following modest scale:—

		S.		
"Wages to measurers, net		12	6	per day.
Rent of an office	25	0	0	per annum.
For fuel	10	0	0	* "
Messenger		0	0	"

Cost of Collecting Revenue.

Pay of clerks, assistants, etc., as may be necessary and as the Governor or officer administering the Government, may deem reasonable, provided that the whole of such expenses do not in any year exceed one-sixth part of the net amount which may in such year be paid to the Receiver General of the

Province in respect of such licenses."

Mr. Robinson, simultaneously with his appointment as Surveyor General of Woods and Forests, on the 19th July, 1827, was also appointed Commissioner of Crown Lands. The system so elaborately framed by the British Treasury Commissioners for his guidance was never carried out or even attempted to be put into effect.

Imperial Instruction's Ignored.

On arriving in Canada, Mr. Robinson found Mr. Robert Shireff acting as Collector of Timber Dues on the Ottawa River. Mr. Shireff was a pioneer of the Ottawa lumber trade and was originally appointed Collector of Crown dues on timber by Lord Dalhousie, in Lower Canada, and afterwards, on his Lordship's recommendation, received the appointment for the Upper Province. His son, Charles Shireff, acted conjointly with him without receiving any formal appointment. Mr. Robinson fell in with the system adopted by the Shireffs, who no doubt, as practical lumbermen, adopted a plan more workable in its details than the method outlined by the Treasury Commissioners.

The Surveyor General, as Mr. Robert Shireff stated, "found my son and myself acting under an arrangement made directly by the Government and he did not feel called upon to interfere with it further than to give each of us as his agents, authority to seize any timber that might be found cut without license, and giving us also from time to time such instructions as appeared to be necessary."

First Receipts.

The first receipts by the Government of Upper Canada from timber licenses were in 1827, when the sum of \$360 was realized from this source. In 1828 the proceeds of timber licenses was \$3,134 and in 1829, \$2,237.

Hon. Robert Baldwin Sullivan, in a statement as to the management of the office of the Surveyor General of Woods and Forests, made in 1840 in connection with the investigation into the business of the Public departments undertaken at that time, says, respecting the system of licenses and collection of dues as managed by the Messrs. Shireff:—

"In the summer or autumn of one year the persons wishing to engage in lumbering applied for a license to cut timber, stating the quantity proposed to be cut, upon which a license issued in the form hereto annexed, marked 'B,' the lumberers paid to the Collector 25 per cent. as an advance upon the Crown dues, and entered into a bond, a printed copy of which will be found in the appendix 'C.'

"In the ensuing summer the timber (having been cut and got out in the winter) arrived in the Chaudiere Falls at Bytown, where it was measured and an account taken of the contents of the several rafts, which then pro-

ceeded to Quebec.

License for Quantity.

"The parties cutting the timber were not required strictly to confine themselves to the quantity specified in the license, and therefore as it was plainly their interest to advance as little money as possible on taking the license out, the quantity cut greatly exceeded that for which the licenses were given.

"This was productive of no actual loss to the Government as the whole

of the timber was paid for at Quebec.

"When the timber arrived at Quebec, Mr. Charles Shireff was in the habit of proceeding thither to collect the Crown dues, and upon his own authority, introduced a system of taking mercantile bills in lieu of the

bonds originally given.

"The purchasers of the timber being generally wealthy merchants, the personal security for the payment of the duties was increased rather than diminished by substitution of the security of the Lower Canada merchants for that of the lumbermen, and although strictly speaking money ought to have been insisted upon, I am not aware of any very material loss which has occurred from the system of taking bills, at the same time it must have been â great convenience to the merchants not to be called upon for money until they had an opportunity of shipping the timber and drawing on London against the proceeds."

Lax Methods

The outcome of the system was unfortunate and entailed a considerable loss to the Province. The Shireffs, being left to manage the collection of dues practically in their own way without any regular or efficient Government supervision, in the year 1831 appointed Jones, Murray & Co., Quebec, a branch of the Montreal house of Horatio Gates & Co., reputed to be the most wealthy merchants in Canada, as their agents to make collections. By the failure of these firms after they had been some years acting in this capacity, and other irregularities arising from the business complications in which the Shireffs were involved, a shortage of several thousand pounds in the returns of money collected for timber dues was occasioned.

The laxity of administration which rendered such a condition of affairs possible in the management of the Woods and Forests Department was typical of the entire executive system of the period. The abuses of the Government were specially noticeable in connection with the disposal

of the Crown domain.

In defiance of both the letter and the spirit of the official instructions repeatedly issued by the Home Government and of all sound principles of national economy, a system of reckless and profuse alienation of the public resources had come into vogue, which seriously retarded the settlement and development of the country, discouraged productive enterprise, and by the impoverishment and discontent which resulted, contributed much to swell the volume of popular disaffection towards the local governing class, which culminated in the Rebellion of 1837. The exhaustive investigation made by Lord Durham into the causes which led to that ill-fated outbreak, fully exposed the extent of the mis-government and corruption which had prevailed for many years, and the prodigal manner in which the natural resources of both Provinces had been wasted by the officials entrusted with their management. The abuses obtaining in connection with the disposal of public lands have so intimate a relation to the question of lumbering regulations and the general conditions of the lumber industry during the ante-Rebellion era, that many of the facts detailed in the evidence appended to Lord Durham's celebrated report, as well as some of the conclusions embodied in that epoch-making document, are directly pertinent to the matter in hand.

Public Lands Administration.

Hon. Charles Buller, Commissioner of Crown Lands for Lower Canada, who was commissioned by Lord Durham to investigate the manner in which Crown Lands had been disposed of, thus speaks of the systematic disregard of the instructions issued by the British Government officials.

"It is true that while in name the property of the Crown was under the control of an English Minister, these lands have been in effect administered by colonial authorities for purely colonial purposes. It was indeed impossible that it should be otherwise. The execution of the instructions from time to time issued by successive Secretaries of State, or Lords of the Treasury, has been of necessity entrusted to those who in the colonies were the peculiar representatives of the English Crown; the Governor acting with the advice of his Executive Council. But the power nominally given to the Governor vested in effect entirely in his Council; and the members of that Council being resident in the colony, having interests of their own to promote, or friends whom they desired to benefit, or it may be enemies whom they were willing to injure, have uniformly exercised their power for local or personal objects, unchecked by a control which in this respect could only be nominal."

Land Grants.

The main abuse from which the country suffered during the period of maladministration was the granting of wild lands in large tracts, under one pretext or another, to individuals or companies, who had no intention of settling on or improving them, but simply held them for the rise in value which they anticipated as the result of opening up the country.

The system of granting wild lands was so frequently altered, and the conditions as to settlement or payment of fees so various owing to the different classes of claimants, that it would be a profitless undertaking to attempt to follow the numerous changes in the regulations in Upper Canada and Lower Canada, more especially as varying methods were often in operation at the same time. But under whatever regulations were in force, and despite occasional attempts to restrict the tendency to the lavish granting of large areas without guarantees for their improvement, the practice was continued under one pretext or another.

When the country fell into the hands of the British, extensive grants were made, some in free and common soccage, according to the English land tenure and others in fief and seigniory in the same manner as those made by the French prior to the conquest. The influx of U. E. Loyalists at the close of the American war of Independence was followed by an increased number of land grants principally in the part of the Province which subsequently became Upper Canada. After the separation of the Provinces in 1791, fresh instructions were issued by the Home Government, the chief object of which was to provide against the evils resulting from excessive grants to individuals, which established 200 acres as the limit of a grant. Certain duties of settlement were attached to every grant, in default of which the land granted was to revert to the Crown. The Governor, however, possessed the power to make an exceptional addition to the grant, and this power appears to have been so freely and frequently exercised as practically to nullify the restriction as to the area to be granted.

Leaders and Associates.

In Lower Canada a method by which the law was ingeniously evaded and influential persons enabled to secure the title to very extensive areas speedily came into operation. It was known as the system of leaders and associates. The individual who was to reap the benefit of the transaction undertook the settlement of a township or smaller area. As leader he secured the signature of a number of other applicants for land, termed associates, who were supposed to be desirous of settling in a body upon the land. Each name represented 1,200 acres of land and when a sufficient number of names had been obtained, the requisite official formalities were complied with and the patents issued. The associates then for a trifling money consideration conveyed their lots to the leader. The latter usually took care to assure this by having each associate sign an agreement, simultaneously with the petition for a grant, binding himself to convey to the leader from 1,000 to 1,100 acres in consideration of the trouble and expense of procuring the survey and grant. The remaining 100 to 200 acres was afterwards conveyed by the associates for one or two guineas as the case might be, which was the real consideration for the use of their names. The system was so open and generally recognized that blank forms of such agreements were printed and publicly sold by the Quebec law stationers.

Mr. Buller states that during the administration of one Governor, Sir R. S. Milne, and under the same six members of the Executive Council who constituted the Land Board, 1,425,000 acres were granted to about 60 individuals.

Lavish Grants.

"The profusion of this land granting Board was rewarded by the Duke of Portland by grants of nearly 120,000 acres of land, rather less than 48,000 being granted to the Governor, and rather less than 12,000 acres to cash of the Executive Councillors of which it was composed.

Several of the Executive Councillors themselves figure in the list of "leaders" of townships.

The system was introduced into Upper Canada, but never fairly established. Some ten townships were granted in this manner, but the rush of applications was so great that the Council was induced, not only to abandon the system, but to rescind the grants made, giving each leader who attempted to fulfil the conditions of the grant 1,200 acres. Mr. William Berczy, to whom the township of Markham had been assigned, and who had acted in good faith in actually settling a body of immigrants on the land, was ruined by the action of the Council in rescinding the arrangement.

Grants of 1,200 acres each were made to individuals of favored classes, including magistrates, barristers, and executive and legislative councillors who received as much as 5,000 acres each, with additional grants of 1,200 each to their children. From 1791 to 1804 these grants were altogether gratuitous, with the exception of fees sufficient to compensate the officials concerned in passing the grant for their trouble.

In the course of the latter year a scale of fees, proportioned to the extent of the grant, was introduced by the order of the Governor-in-Council. upon the payment of which almost anyone was at liberty to obtain a grant. Privileged persons, such as U. E. Loyalists, militiamen, etc., were exempt from any payment. In 1818, in addition to fees, the performance of set-

tlement duties was required. Changes in the system were made from time to time, generally in accordance with regulations or instructions issued by the Home Government, with the object of checking the prevailing laxity,

and securing some substantial return for the lands granted.

When Hon. Peter Robinson was appointed Commissioner of Crown Lands in Upper Canada in 1827, he was instructed by the Lords of the Treasury that all public lands were to be sold by auction, and to be paid for by instalments without interest.

The Canada Company.

This system was slightly modified in 1833 by requiring the payment of interest on unpaid portions of the purchase money. The ill success of the Government land policy as a means of promoting settlement induced them ir two conspicuous instances to delegate to others the disposal of large areas An extensive tract in the western portion of the of the Crown Domain. Province was placed under the entire control of Colonel Talbot, and the whole of the Crown reserves, and 1,100,000 acres in one block were sold to the Canada Company.

Cleray Reserves.

The evils resulting from allowing vast areas to fall into the hands of speculators who made no improvement was further aggravated by the policy of setting apart Crown and clergy reserves, the latter constituting nominally one-seventh of the entire area, but frequently in practice amounting to a much larger proportion. The result was to discourage the settler from making a home in the wilderness on account of the large tracts held for speculation, and where the improvements dependent upon co-operative labor could not be undertaken. The Government policy, while it entailed unnecessary hardships and inconveniences upon the settlers, did not in the end benefit the favored classes who were permitted to monopolize extensive areas of land with an eye to ultimate profit. The conditions of occupancy had been made so onerous that there was no sale for the property they had regarded as an easily-acquired source of wealth. On this point, Mr. Buller says:

"Even during the period, however, within which these grants were made, the grantees began to discover that the very great facility with which land could be acquired rendered its possession well nigh valueless. To settle their grants was impossible without a large immediate outlay, for the purposes of affording settlers the means of communicating with each other and with a market. This work, however, could be undertaken by no one individual with effect, unless the other grantees, across whose lands the road must pass, joined in the work, and even had this been done the practice of making Crown and clergy reserves, and thus withholding from settlement two-sevenths of every township, imposed upon the proprietor of the remaining land so much additional expense for which he could never expect any return. The grants, too, were so utterly disproportioned to the population and wealth of the Province, that even if all the grantees had set to work in good faith to settle their lands according to the terms of the grant, they must have been stopped by their inability to obtain settlers."

This was written more especially with reference to the land practically locked up from settlement in Lower Canada by the operation of the system of leaders and associates, but it was equally true of the results obtained in Upper Canada by the practice of profuse and indiscriminate land granting. Concerning the extent to which the land of the latter province had been parted with by the Government in excess of the demands for settlement,

the same writer says:—

"Perhaps, however, the most striking proof of the early improvidence of the Government in its disposal of the waste lands in the Province, is to be found in the fact, that from 1763 to 1825, during which period the population had slowly grown up to 150,000 souls, the quantity granted or engaged to be granted by the Crown was upwards of 13,000,000 acres, while during the thirteen subsequent years, in which the population increased from 150,000 to 400,000, the quantity disposed of, including the sale of the Clergy Reserves, is under 600,000 acres. A fact such as this needs no comment."

Timbered Land Grants.

The bearing of this condition of affairs upon the lumber trade, and the management of the forests remaining in the hands of the Crown as a source of revenue, can be very easily appreciated. The land alienated in such extensive areas, far beyond any possible demand for settlement for many years, was in many instances covered with valuable timber. Those engaged in lumbering operations speedily discovered that in many cases it was a good deal more profitable to buy wooded land than to pay even the moder-

ate price charged for timber licenses.

The quantity of cheap unimproved land in the market and the readiness with which grants were obtained, seriously diminished the revenue from licenses, induced reckless and improvident methods of lumbering, and made it profitable to buy land for the sake of stripping it of the growing timber and leaving it waste and unproductive. The principle embodied in repeatedly issued instructions from the Home Government of setting aside permanent forest reserves and confining grants for settlement to such lands as were adapted for agriculture, having been disregarded, much of the area covered by the extensive grants made was capable of producing nothing but timber to advantage and once denuded became practically valueless, until the slow processes of nature should have renewed the forest vegetation.

A few extracts from the evidence taken before the Assistant Commissioners of Crown Lands and Immigration in 1838 which furnished the basis for the Hon. Charles Buller's report, indicates how injuriously the abuse of the land granting system affected the public interests, both in reference to the revenue from timber licenses and the preservation of the forests. They also comprise much valuable information as to the general condition and prospects of the lumber trade at that period. The evidence is given in the form of question and answer, the following being taken from the testimony of John Davidson, one of the Commissioners of Crown Lands for

Lower Canada, in relation to matters in that Province.

Land Cheaper than Timber.

Q. "According to the price required for timber licenses under the Treasury instructions may it not be cheaper to purchase land for the sake

of the timber merely, than to pay for a license?"

A. "It may be so, and an instance came to my knowledge of an attempt of the kind in the newly surveyed township of Wakefield, which I however defeated by directing the agent not to accept bids, unless from persons whom he believed to be intending settlers."

Q. "Have you then the power of rejecting an offer made to purchase

land made at a public auction?

A. "Under the conditions of sale publicly read by the agent no sale is valid until confirmed by the Commissioner of Crown Lands."

- Q. "Do you imagine any land has been purchased with this intention?"
- A. "I could not say that no land has been purchased with this view, but no sales have been made in surveyed townships. I cannot bring myself to believe that they have been made to any great extent."
- Q. "Have you not reason to suppose that the large purchase of 90,000 acres to which you have referred in Gaspé, was made with this view?"
 - A. "It was avowedly so, I was myself informed so by the purchasers."

Q. "What was the price at which this land was sold?

A. "Varying from 1s. 8d, to 4s. per acre."

James Hastings Kerr, a land agent, gave very explicit evidence as to prevalence of the practice of buying land solely for lumbering purposes. Some of the more striking portions of his testimony are here reproduced.

Q. "Have you had an opportunity of acquiring information as to the disposal of timber in the Province (Lower Canada) by the Crown?"

A. "I have."

Q. "Does the system appear to you to be a good one?"

A Bad System.

A. "It does not. It does not yield that revenue to the Crown which it ought in fairness to do, and which I believe might without injury to the dealer in timber be easily derived from it. The practice within these three years has been for the Crown to dispose of licenses to cut timber at public sale by tender and overbid. The upset prices on timber are determined by the Governor, upon the recommendation of the Commissioner of Crown Lands, and were until last year as follows:—White pine square timber, ½d. per foot; red pine, 1d. per foot; white pine logs of 12 ft., for deals, 4d. each; spruce pine logs of 12 ft. for deals, 2d. each; red pine logs, 7½d. each. At the sales of last year the price of white pine logs was increased to 5d. and spruce to 2½d. This price is even now much less than the Government might fairly ask not only in proportion to the selling price of that timber in England, but also to its value in the Northern Continent of America. At a very early period it is certain that there must be a great demand in the United States for Canadian pine and spruce timber."

Q. "But the prices you have named are only the upset prices for the

tender?"

A. "I know of no case where an overbid was made upon the tender, except in one instance, and that was only by mistake."

Q. "Then in point of fact there is no competition at the sale?"

No Competition for Timber Limits.

- A. "None. There is a perfect understanding among the buyers that none of them shall bid more than the upset price."
 - Q. "So that in reality the prices called upset prices are fixed prices?"

A. "They are."

Q. "And are in your opinion too low, having reference to the value of the timber in the markets of Canada, Britain and the United States?"

A. "Decidedly so."

Q. "You believe that there will occur soon in the United States a great demand for Canada timber; upon what grounds do you form that opinion?"

U. S. Timber Supplies.

A. "I visited the United States in 1836 for the express purpose of ascertaining at the ports of New York and Boston, what encouragement there might be for the importation of manufactured Canada timber, and also with a view to ascertain what supply of pine and spruce timber might yet remain in the United States. With the exception of the State of Maine to the North upon our own border, and of Georgia to the South, at a great distance from us, which latter produces an article of very inferior quality, I became satisfied from very careful inquiry that very little timber of that sort remains in the States generally, and that even with the two exceptions I have named, the supply will be exhausted in a few years, provided that the demand continues to increase as it has done for many years past, along with the progressive prosperity of the Americans."

Q. "Is the quantity of the best kind of pine, spruce, and oak timber,

the property of the Crown of this Province, very considerable?"

A. "I believe it to be so, particularly in the country bordering on the Ottawa, the northern shore of the St. Lawrence, a great distance on the shore of the Saguenay and its tributaries, on the north shore below Quebec, and in the district of Gaspé; sufficient in fact to supply the demand of the United States for many years to come, and if not sold under prices such as might easily be obtained, if better communication was opened with the United States, as to produce a very large revenue."

Q. "Even at the present low rate of timber licenses, is it not often more advantageous to purchase the land where the timber is growing, than

to purchase a license to cut the timber upon it?"

License vs. Purchase.

A. It is so decidedly upon well-timbered tracts. I have been employed myself to purchase land with this view. It may be conceived that this is the case when in the districts where land is purchased with this object, the price of a license would amount on the average to about 6s. 8d. per acre. and the average price of land is only about 3s. 2d. per acre. You therefore get your timber at less than half price, and have the land remaining when the timber is cut. For example, last year a saw-mill proprietor had cut timber upon a 200 acre lot in which I was interested, in one of the townships south of St. Lawrence. I seized the timber which he had cut, and entered into an agreement with him, by which I received fully 10s. an acre for the trespass upon the timber, allowing him to take all he had actually felled."

Q. "What is the upset price of Crown Land in that township?"

A. "Four shillings. I bought for myself and others all the Clergy Reserves then open for sale in that township in 1836, amounting to about 1,800 acres, at an upset price of 4s. an acre."

Q. "If such be the case, however, any such rise as you appear to contemplate in the price of timber licenses, ought to be accompanied by a cor-

responding rise in the price of the wild land of the Crown?"

A. "Undoubtedly so."

These utterances, like those which follow, are alike interesting from the historical point of view and significant in their bearing upon the existing situation, as showing how even at that comparatively early date, the American demand for the product of Canadian forests had become a prominent factor in determining the value of our natural resources. When the near

exhaustion of the American timber supply is spoken of, it must be borne in mind that the march of Western settlement and the development of methods of transportation had not proceeded far enough to render the pine forests of Michigan and the other wooded areas of the American Northwest available as a source of supply. It is none the less instructive to note, that far-seeing and experienced practical men were beginning to realize that the necessarily increasing timber and lumber requirements of the Eastern States, with their rapidly growing population, should be taken into account in fixing the price of timber-bearing lands so as to secure the increment to the public.

Thos. Allen Stayner, Deputy Postmaster-General for British North America and a large landed proprietor in both Provinces, replied as follows to the question as to what value should be placed on the wild lands of Lower Canada:—

"Besides the price of lands in the United States I must, in answering this question, have regard to the large quantities of land in the Province held in private hands, much of which is choice land, and in locations most favorable for settlement. There are, perhaps, a million and a half acres of wild land in the possession of individuals, many of whom would be willing to sell at what would be called a low rate for cash, say from 4s. to 7s. 6d. currency an acre. While so much land is wild in this way, it will naturally influence any arrangement for the disposal of the waste lands of the Crown.

"Wild lands vary in value very materially as well as from the quality itself, as from its situation; but there is also another circumstance connected with the question of fixing the value upon waste lands of the Government, which it may be well to bear in mind, that is the timber upon it.

American Investors.

"Until very recently, the timber as an article of commerce was not taken into consideration, either by Government or private holders, but it is now otherwise. Our American neighbors have discovered, to their astonishment, that their own resources for pine timber are nearly exhausted, and they are looking with great interest to the lands in Lower Canada and New Brunswick, which possess that valuable article. In the year 1835 speculators from the States of Maine and New York came into the Province and purchased about a million acres of land said to be wooded with pine or spruce; and there is no doubt but for the financial difficulties which befel the whole of the United States at the close of the year 1835 and commencement of 1836, much more extensive acquisitions of pine and spruce lands would have been made by the Americans; the disposition to acquire those lands is only temporarily suspended, and it is quite probable that in four or five years more the passion will return as strongly as ever.

"Now, according to the scale by which the Americans estimate such lands, they may be considered as worth from two to six dollars an acre, merely for the timber. The question may therefore be, whether this consideration is to constitute an element in the scheme to be devised, and if so to what extent? It should be borne in mind also, that the land most valuable for the timber is seldom of great value for agricultural purposes. Setting aside for the moment the pine and spruce lands, I do not think that a higher rate than 7s. 6d. currency an acre can be put upon the waste lands of the Crown."

The evidence of Charles Shireff, the former agent for the collection of the timber dues on the Ottawa, corroborated the testimony above cited as

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to the prevalence of the practice of buying timbered lands instead of tak-

ing out licenses, and the resultant loss to the revenue.

Q. "Does not the present facility of obtaining large blocks of land, and at low prices tend to diminish the amount of this revenue by making it more advantageous to individuals to purchase land for the sake of the tim-

ber only, than to pay for licenses?

A. "I should say so. Cases have occurred in which land has been bought merely for the timber, upon a calculation, of course, that by this means the timber would be obtainable at a cheaper rate than if it had been cut under license. I can mention that of a company of Americans, who purchased from private individuals some thousands of acres in the township of Onslow, at the rate of, I think, 10s. per acre, which I do not conceive could bear any proportion to the value of the timber. Many similar cases, though to a smaller amount, have occurred within my knowledge; and the temptation to do this was very great, because when the purchaser had paid the first instalment and obtained his location ticket, he could proceed to cut the timber, and the only penalty for not paying the other instalments was the resumption of the land, about which he was very indifferent. This was unfair to those who cut timber under the licenses."

Present License System Advised.

Q. "Has any method occurred to you to prevent the practice?"

A. "The only method that has occurred to me is that Government should hold these lands which are generally unfit for settlement and merely

sell the timber upon them."

According to a statement made at this investigation by Richard Hill Thornhill, Chief Clerk of the Crown Lands Office for Upper Canada, the gross amount received by the Government of the Province in timber duties from the appointment of the Surveyor General of Woods and Forests in 1827, up to January 30th, 1838—a period of about ten years and a half—was £58,085, 4s. 11d. exclusive of defalcations amounting to upwards of nine thousand pounds. Hon. Charles Buller's report on the Public Lands and Emigration, published as an appendix to Lord Durham's report, presents the following conclusions based upon the large volume of evidence presented during the investigation, the general tenor of which may be gathered from the excerpts above quoted.

After briefly reviewing the timber policy of the earlier days of the Province, and the then recent attempts to derive a revenue from the issue of licenses to cut timber, Mr. Buller goes on to say regarding the forests:

"I was unable to obtain any accurate information as to the probable value of this property. From the evidence, however, of Mr. Kerr and of Mr. Shireff, it appears that the quantity of timber upon the waste lands of the Province is practically unlimited, and that, independently of the consumption of this article in England, there exists at present a demand for pine timber in the Northern and Western States of the Union, which may be expected to experience a very rapid increase, and which can only be supplied from the British North American colonies.

"From the evidence of Mr. Kerr and Mr. Davidson and others, it appears that the revenue which, under a wise and careful system of management, might have been derived from this property, has been needlessly sacrificed by the practices adopted in the disposal of public lands. The value of the timber upon an acre of land at the price of government licenses, is frequently more than ten times greater than the amount required to be paid, in order to obtain possession of the land upon which the timber is grow-

ing. Payment of the first instalment of the purchase money is alone necessary for this purpose, and before the second instalment is due or any measures are adopted to enforce payment, the timber may be cut down and the land abandoned. To what extent this has been the case it is difficult to determine; but there is no doubt that very large tracts have been purchased for the sake of the timber merely; because the whole purchase money if paid, has been very far less than the price of timber licenses, and because the land would remain in the possession of the purchaser after the timber had been cut. Besides this cause of defalcation in the revenue that might have been derived from this source, there has been no proper inspection on the spot, so that the quantity of timber cut has been very far greater than that for which a license has been obtained.

Land Sales for Cash Only.

"The plan which I have proposed of selling the land at a fixed uniform price, and requiring the payment of the whole purchase money at the time of the sale, will prevent to a very considerable extent, the purchase of land for the mere sake of the timber. As the land upon which the most valuable timber grows, is generally of an inferior quality of soil and of no value for agricultural purposes, it may be expected that but little of it will be purchased, and that the whole timber fund will be derived from the sale of licenses. It will therefore be expedient to establish an efficient system of supervision in all the timber districts and by comparing the returns made by the district inspectors of the quantity of timber cut, with the entries at the Custom House of the quantity of timber shipped, some security may be obtained against the frauds which are now practised in respect of this property.

"It is suggested by Mr. Kerr, that the present price of timber licenses is too low, having regard not merely to the value of the timber in the English market, but also to its price in the United States. Although disposed to concur in this opinion, I do not feel myself warranted in recommending any advance in that price at present upon the only information I now possess, and especially considering the uncertainty which is felt to be attached to the continuance of the present timber duties in England. This is one of the matters which must be left to the special authority which I shall subsequently recommend, to determine from further and more accurate inquiries.

"The present average annual amount produced by the sale of timber licenses in all the colonies appears to be about £24,000, but there seems no reason to doubt that under an improved system of inspection and manage-

ment the amount might be greatly increased."

Disposal of Revenue.

The amounts received by the Government as timber dues as well as the considerably larger sums accruing from the sale of public lands were regarded as entirely at the disposal of the Crown, that is to say, the administration of the day without responsibility to Parliament as to their expenditure. They were classed with some other items as "casual and territorial revenue," and kept entirely apart from the funds under control of the Legislature. The introduction of the system of payment for timber licenses almost simultaneously with that of the sale of the land, very greatly increased the revenue of the province and at the same time aroused strong political feeling by reason of the questions involved as to the management and expenditure of this fund. The abuses which speedily arose from the

irresponsibility of the executive in the handling of the casual and territorial revenues did much to intensify the popular irritation which found vent in the outbreak of 1837. The principal causes of complaint in connection with the administration of this fund were set out with considerable fulness of detail in a series of resolutions passed by the Upper Canadian House of Assembly on March, 18th, 1829, some of which are reproduced.

"Resolved, that the possession of Revenue by the Executive to defray all expenses of the Civil Government, independent of Parliament, is inconsis-

tent with public liberty.

"Resolved, that it appears from the message of His Excellency that the whole of the Estimate for the Civil List can, this year, be defrayed from the Crown Revenue and that the expenditure of about £10,000 per annum, which was defrayed till the year 1827 by grants of the Imperial Parliament, is now also transferred to what is called the Territorial revenue of the Crown, arising from the Canada Company Agreement, over the appropriation of which monies it is denied that the House has any superintendence or control.

"Resolved, that from the accounts in detail of the appropriation of the sum of £10,825 as furnished this House by His Excellency, a copy whereof is annexed, it appears that by far the greater part of that sum has been improvidently misapplied, because independent of the pretensions to a monopoly of the Clergy Reserves the large sum of £2,800 is allotted to the Clergy of the Protestant Episcopal Church, although that church forms a comparatively small proportion of the Christians in this Province, and because there are various pensions and allowances to persons who ought not te be burdens on this struggling Province; a salary to a naval officer as a sinecure, a salary to an agent in England, utterly unknown by name, character, duty, service or usefulness to this House or to the country, and other salaries and allowances improvidently paid (with the exception of the Lieutenant-Governor and Judges) to public officers for whom has been provided by this House of Assembly, independent of these extra allowances, such ample salaries and contingencies in years of past extravagance that they ought, in justice to the condition of the province, to be greatly reduced.

"Resolved, that the Provincial Executive have heretofore, in the appropriation and expenditure of public monies, violated that economy which, is in justice due to the people from whom they are raised, have abused the application of the fund improvidently granted by the 56th Geo. III., chap. 26, in aid of the Civil Government; have granted pensions and multiplied offices at the public expense without consent of Parliament, and have incurred and continued wasteful charges and annually increasing expenses in the administration of Justice and in the other departments, under an inveterate system of Executive patronage at the sacrifice of public economy; all which evils have heretofore existed from injuriously infusing into the country and even into the Legislature a spirit of subserviency incompatible

with the liberties and interests of the people."

The law of England exempting the subject from all taxes not imposed with the consent of Parliament and securing Parliamentary control over all expenditures, was declared to be the "ancient, common and fundamental law issuing from the first frame and constitution of the kingdom," and it was claimed that as the Provincial Legislature had adopted the laws of England as the rule for decision in all controversies relative to civil rights, that corresponding powers and duties to those inherent in the British Parliament appertained to the provincial body.

This clear and forcible presentation of the case produced little if any immediate effect. The evils complained of were continued despite all

remonstrances. In 1835 a select committee of the House of Assembly on grievances, of which William Lyon Mackenzie was chairman, presented a report setting forth the administrative abuses of which the public complained, the following paragraph of which indicates how the absolute control of the executive over the expenditure of a large and increasing portion of the public revenue rendered the Government completely independent of the people's representatives:

"The almost unlimited extent of the patronage of the Crown, or rather of the Colonial Minister for the time being and his advisers here, together with the abuse of that patronage are the chief sources of colonial discontent. Such is the patronage of the Colonial Office that the granting or withholding of supplies is of no political importance unless as an indication of the opinion of the country concerning the character of the Government, which is conducted upon a system that admits its officers to take and apply the funds of the Colonists without any legislative vote whatever."

An agitation on similar lines was meanwhile going forward in Lower Canada and obtained such headway that in 1835 the Earl of Gosford, Sir Charles Edward Grey and Sir George Gipps were appointed as commissioners for the investigation of grievances in Lower Canada. Among the list of complaints presented to this body the question of the control of the revenue occupied a foremost place. The demands made by the House of Assembly of Lower Canada were thus summarized in the instructions forwarded by Lord Glenelg to the commissioners under date of July 17th, 1835.

"After the several gradations through which this question has passed,

it has at length assumed the following shape:

The Claims of the Legislature.

"As representatives of the people of Lower Canada the House of Assembly claims the right of appropriating to the public service, according to their own discretion, the whole of the revenues of the Crown accruing within the Province. The claim extends to the proceeds of all parliamentary and provincial statutes, whatever may have been the original conditions of these grants; to the funds drawn from the sale of timber and of the waste lands of the Crown; to all fines and forfeitures, and to the income derived from the Seigniorial rights inherited by the King from his royal predecessors. In fine the authority of the Local Legislature over the income and expenditure of the Province is declared to be so extensive, as to embrace every part of that receipt and outlay, and so inalienable as to supersede even the concessions deliberately made in preceding times by the former representatives of the Canadian people."

On January 30th, 1836, Sir Francis Bond Head, who had a short time before assumed the Lieutenant-Governorship of Upper Canada, laid before the House of Assembly the instructions received on his appointment, embodying the answer of the Home Government to the representations made by the House as to the grievances requiring redress. This document in reference to the question of the control of territorial and casual revenues stated that claims precisely identical had been preferred by the Assembly of Lower Canada, and that in the instructions to the Commissioners of Enquiry who visited that Province the views of the Home Government had been already

set forth.

The instructions to the Commissioners were therefore appended to the despatch as outlining a basis for the settlement of the question in both Provinces. In this paper the whole subject is treated very fully, the position taken by the Colonial Office being that it was necessary to secure the inde-

pendence of the judiciary and the principal officers of the Local Government, and that to this end official incomes should be paid, "not at the pleasure of the popular branch of the Legislature, but from adequate funds to be irrevocably pledged for that purpose."

Claims of the Crown.

It was urged that alterations on the subject of the emoluments of the chief officers of the Crown, and especially of the Governor, would be derogatory to their character. "The tendency of such controversies would unavoidably be to introduce a disesteem for those functionaries by exhibiting them in the light of pensioners on the reluctant bounty of the representatives of the people." The officials of the Local Government, it was contended, having frequently unpopular duties to perform, and being called upon to oppose the passions and emotions of the day, should be raised above all influence, and suspicion of influence, of unworthy fear or favor. They should not be looking for their subsistence to the favor of a body which necessarily reflected most of the fluctuating movements of the public "Such are the principal motives," wrote the Colonial Secretary, "which induced me to conclude that the King could not consistently with the interests of his Canadian subjects relinquish, except in return for an adequate Civil List, the control which His Majesty at present exercises over the hereditary and territorial revenue. * * * A temporary cession of the revenue in return for a provision for the chief public officers of the Province for a corresponding period, would be the most satisfactory arrangement."

The despatch took strong ground against transferring from the Executive to the popular branch of the Legislature, the management of the uncleared territory. "His Majesty's confidential advisers," says the writer. "regard as conclusive and unanswerable the objections which are made to confiding the management of the uncleared territory of Lower Canada to either or both of the Houses of General Assembly, or to persons appointed by them and subject to their control. In the distribution of the different powers of the State the office of settling and alienating the uncleared territory properly belongs to the Executive Government." Any expectations

1837.

which might have been entertained of a satisfactory settlement of the difficulty on the basis laid down in the Lieutenant-Governor's instructions were speedily dissipated by the bitter controversies which shortly afterwards arose between Sir Francis Bond Head and the dominant party in the Legislature. The popular feeling of irritation was further inflamed by the arbitrary course pursued by Lieutenant-Governor Head, and culminated the following year in the quickly suppressed outbreak led by William Lyon Mackenzie, which, though an utter failure considered as a military enterprise, did much to arouse the attention of the Government and people of Great Britain to the real condition of affairs in Canada and bring about responsible Government.

In the year 1838 the Committee on Finance of the House of Assembly brought in a report on casual and territorial revenue, submitting a draft of a bill appropriating this branch of the revenue, accompanied by a series of resolutions respecting the appropriations to be made therefrom, in accordance with the plan of settlement proposed by the Colonial Office. This measure passed the Assembly but failed to become law, as it did not obtain

the concurrence of the Legislative Council. The following year, however, the subject was brought before a Joint Committee of the two Houses, and a bill to appropriate the casual and territorial revenues passed in both branches of the Legislature. The royal assent to the measure was, however, refused, but it was intimated that the objections entertained to it were such as could easily be removed.

Meanwhile the greater question of the union of the Provinces began to engross public attention. In the discussion of the subject the surrender of the casual and territorial revenues in return for the granting of an adequate civil list was one of the points insisted on by the Upper Canada Assembly. The Act of Union adopted by the British Parliament in 1840 in conferring responsible government upon the people of Canada, placed in the control of the Legislature all territorial and other revenues at the disposal of the Crown, subject to certain charges, the principal of which was the civil list for the payment of the salaries of the Governor, Judges and other officials amounting to £75,000.

UNDER THE UNION.

The system of disposing of licenses to cut timber on the Crown domain, which, as has been shown, was managed with great laxity, under the Government of Upper Canada, yielding a mere fraction of the sum which it might have contributed to the revenue under proper regulations, engaged the attention of the administration of the United Provinces at an early date. On the 30th of March, 1842, instructions as to the granting of licenses were issued by the Hon. John Davidson, Commissioner of Crown Lands, to James Stevenson, Collector at Bytown, as Ottawa was then named, with the object of ensuring greater strictness and introducing the principle of competition among lumbermen. The following are some of the more important rules laid down:

"The Licenses to be granted during the present year are to contain the same conditions as heretofore, as it respects the prices for the timber, the terms of payment, and the manner in which the timber is to be

measured.

"All Licenses are to be granted for a fixed period from the date of License, after which the right of any person over the limit which it describes is to cease and determine:

To Induce Competition.

"When application is made by an individual, other than the party who occupied the limit during the preceding year, and where there is no reason or order to withhold a renewal of license in favor of the person who occupied it during the preceding year, such application shall be suspended until the first of August, unless the person who had the license the preceding year shall, in the meantime, come forward and request a renewal; then it shall be at your discretion either to dismiss the first application, or within ten days after the application of the person who worked the limit, offer it at public sale and adjudge it to the highest bidder (the party who held the license the preceding year being entitled to bid first at the upset price), with the condition that the party to whom the limit may be adjudged shall pay the auctioneer's fees, deposit one-fourth of the purchase money, and give sufficient security for the remaining three-fourths before four o'clock of the day of the sale; and in the event of his failing to do so, the limit to be assigned to the next highest bidder who can comply with the conditions of sale.

By Public Sale.

"If two or more applications be received on the same day for a limit not worked upon the preceding year, or not worked upon according to the true spirit and meaning of the license granted, the limit shall be offered at public sale within ten days after the applications are received, on the conditions stated in the previous paragraph as to auction fees, deposit and

security.

"When sufficient information is laid before you to assume that the terms and conditions of the license, granted for a particular limit, have not been strictly complied with, or that the party is charged with having trespassed on the limits of others, it is at your discretion to refuse, to the party complained of, license to cut timber; but, at the request and expense of the party, you may name a D.P.S. to examine into the complaint, and if his report shall rebut the charge, the License may be renewed or one issued for some other limit.

Amount to be Cut.

"The quantity of timber to be inserted in the License, and which the parties bind themselves to take out, is to be estimated at 5,000 feet for every mile in length, and no greater extent of limit than 10 miles is to be licensed

to any individual on any one place."

Wilful trespass by license holders upon Crown property not included within their limits was declared to be punishable by the cancellation of the License and the seizure of the timber so cut. District agents in surveyed townships were charged with the duty of protecting from trespass the Crown property within their agencies, the Bytown collector being instructed to furnish them with every assistance to prosecute trespassers.

The provisions above quoted for the disposal of licenses, in certain cases, by sale to the highest bidder, seem to be the earliest practical recognition of the advantages of the auction system, afterwards extended from time to time, and finally adopted altogether with such satisfactory results both to the lumber trade and the public interest, securing to the Treasury the full value of lumbering privileges, while affording exact and evenhanded justice to all applicants.

The receipts of the old Province of Upper Canada for timber sales for the year 1839 were £8,244, and for the period commencing January 1st, 1840, and ending 9th February, 1841, £18,881, a difference probably due to irregularity in the methods of collection rather than fluctuations in the

trade.

The timber receipts for Canada under the new regime were £37,572 in

1842, £46,301 in 1843, and £28,828 in 1844.

While, as has been shown, the British statesmen who in the early days of the colony directed, or rather endeavored to direct, the course of the Colonial Executive, fully realized the importance of maintaining timber reserves, there is little in the proceedings of the rulers of Canada under the system of responsible government to show that they appreciated, to any extent, the desirability of preserving the forests as a source of future supply. Such, in fact, was the general prevalence of the idea that the timber resources of the country were practically inexhaustible, coupled with ignorance as to the possibility of at the same time realizing a periodical crop and preserving the productiveness of the area from which is was taken unimpaired; that even had more enlightened views been held by those charged with the administration of affairs, they would have met with popular opposi-

tion and ridicule. Those who possessed some vague ideas that the work of deforestation was proceeding too thoroughly, and that it might be advisable to call a halt, were not sufficiently practical to effect any good result. One of the earliest, perhaps the very first public remonstrance against deforestation may be found in the Journals of the Legislative Assembly under the date of May 11th, 1846, in the following paragraph:

"On motion of Hon. Mr. Laterriere, seconded by Mr. Tache. Resolved, that this House will on Wednesday next resolve itself into a committee of the whole House to consider whether it would not be expedient to prevent the sale of timber from off the Public Lands." All that is recorded of the discussion is the curt official entry for the following 3rd day of June to the effect that "the House accordingly resolved itself into the said committee. Mr. Hall took the chair of the committee and after some time spent therein Mr. Speaker resumed the chair." In the absence of Hansard, or even the briefest mention of the matter in the newspaper reports of the period, it may be doing Mr. Laterriere an injustice to class him with the well-meaning but unpractical people who, in the earlier days of the forestry movement, sought to "save the forests" by prohibiting all use of the axe within the limits of the area to be preserved. But the wording of the resolution certainly bears this construction.

New regulations were issued during 1846 when the following notices

to applicants for timber licenses appeared in the Canada Gazette.

CROWN LANDS DEPARTMENT,

Montreal, 24th June, 1846.

Notice is hereby given that application for Licenses to cut Timber on the River Ottawa and its tributaries will be received by James Stevenson, Esquire, at Bytown until the fifteenth day of August next.

1st. No new limits will be granted exceeding 5 miles in front by five

miles in depth, or half way to the next river.

2nd. Present holders of licenses will be allowed to renew them for the ensuing and two more seasons without alteration of limits, but after the 1st May, 1849, all timber berths will be curtailed to the above mentioned sizes; the present occupant having the choice of the part of his present limits which he will be permitted to retain. The surplus will be disposed of as may hereafter be determined upon, of which due notice will be given.

3rd. Licenses are not to be transferable and any subsequent attempt to infringe or evade this regulation will subject the party concerned to the forfeiture of his license and of all moneys paid on account of the same. Applicants to state whether their applications are made for themselves individually or as concerned with others or on behalf of other parties.

4th. All timber berths for which no application for renewal shall have been made by the present owners, or in regard to which the applicant shall have neglected to comply with the conditions of renewal on or before the 15th of August, shall be put up to public sale without further notice on the 1st September next, together with all other Timber Berths for which more than one application shall have been filed, to be adjudged in cases of competition to the party bidding the highest premium for the same, to be paid down at the time of adjudication.

5th. The quantity of Timber to be inserted in the License and which the parties will bind themselves to take out, is to be estimated at 1,000 feet per square mile, upon the price of which a deposit of one-fourth will be required before 4 o'clock on the day of sale; if not then paid the Berth to be adjudged to the next highest bidder or next applicant. Bonds as now

practised to be given for the remaining three-fourths, signed by the principal and two sufficient sureties within eight days after; failing which twofifths of the deposit and license to be forfeited.

1,000 feet per Mile.

6th. It is to be understood that licentiates are to manufacture at least 1,000 feet of timber per square mile granted (if to be had within the limits), should a less quantity be made a proportionate amount of the deposit will be forfeited and the limits curtailed accordingly.

7th. After the 1st September all vacant timber berths will be granted

to the first applicant on his complying with the conditions of sale.

8th. Parties applying for timber limits on unexplored rivers will be expected to furnish a sketch of the same by a sworn surveyor, connected with some surveyed or known point, and describing distinctly the point at which the limits are to commence. Should the sketches so furnished subsequently prove to be incorrect all licenses based upon them will become null and void.

9th. Limits hereafter declared forfeited for non-fulfilment of the conditions stipulated, to be adjudged to the party giving the information and proving the fact to the satisfaction of the department, or if not required

by him to the next applicant.

DEPARTMENT OF CROWN LANDS, Montreal, August 14th, 1846.

Notice is hereby given that (with the exceptions mentioned at foot) applications will be received until Thursday, the first day of October next, and Licenses granted by the various District Agents of this Department to cut Timber on the vacant Surveyed and Unsurveyed Lands of the Crown within their respective agencies.

Five Mile Limits.

1st. No new License will be granted exceeding five miles in front by

five miles in depth, or half way to the next river.

2nd. Holders of Licenses will be permitted to retain their present limits until the 1st of May, 1849, on complying with the conditions of renewal, but after that period, their limits if larger will be reduced to the above mentioned sizes.

3rd. Licenses are not to be transferable without the sanction of the Department, and any attempt to infringe or evade this regulation will subject the party concerned to the forfeiture of his License and of all monies paid on account of the same. Applicants are to state whether their applications are made for themselves individually, or as concerned with others, or on behalf of other parties.

Auctions.

All Timber Berths not covered by Licenses, or for which no applications for renewal shall have been made, will be sold to applicants on the said 1st of October, and in case of competition be adjudged to the party bidding the highest premium to be paid down at the time of sale.

The quantity of Timber to be inserted in the License, and which the parties will bind themselves to take out is to be estimated at 1,000 feet per square mile, upon the price of which a deposit of one-fourth will be required before 4 o'clock on the day of sale; if not then paid, the Berth to be adjudged to the next highest bidder or next applicant. Bonds as now practised to be given for the remaining three-fourths, signed by the principal and two sufficient sureties within eight days after, failing which two-fifths of the deposit and license to be forfeited.

Should a less quantity of Timber be made, than specified in the license, a proportionate amount of the deposit will be liable to forfeiture, and the

limits to be curtailed accordingly.

Parties applying for Timber Limits on unexplored rivers will be expected to furnish sketches of the same by a sworn Surveyor, connected with some surveyed or known points, and describing distinctly the points at which the limits are to commence. Should the sketches so furnished subsequently prove to be incorrect, all Licenses based upon them will become null and void.

Limits hereafter declared forfeited for non-fulfilment of the conditions stipulated, to be adjudged to the party giving the information and proving the fact to the satisfaction of the Department, or if not required by him to the next applicant.

After the 1st of October next, all vacant Timber Berths or Tracts will be granted to the first applicant on his complying with the conditions of

sale.

Districts Reserved.

The Districts excepted from the above regulations are in Upper Canada, the Bathurst and Dalhousie Districts, and that part of the Midland District lying beyond the Northerly outlines of the Townships of Sheffield,

Hinchinbrooke and Bedford.

In Lower Canada all the easterly side of the River Ottawa above the Chaudiere Falls, commencing with the Townships of Hull and Wakefield, which will remain as heretofore under the management of James Stevenson, Esquire, at Bytown, to whom application to cut timber, in any of the last mentioned Districts or Tracts must be addressed.

Quantity Reduced.

N.B. In consequence of the present depressed state of the Timber Trade, the quantity of timber to be cut per square mile has been reduced for the season from 1,000 to 500 feet—upon which latter amount only the deposit

will be required.

It will be observed that while the first of these notices, which applies only to the Ottawa region, absolutely prohibits the transfer of licenses; the second of a later date, which is more general in its scope and excepts the Ottawa section from its provisions, modifies this provision by requiring the sanction of the Department to all transfers. Presumably the condition was similarly relaxed in the territory covered by the first notice also, and it is also probable that the reduction of the quantity of timber to be cut per square mile was generally applicable.

The year 1845 was an exceedingly prosperous one for the lumber trade. There was a heavy demand at that time for our timber in the British market and prices were very remunerative. The quantity of timber brought to market at Quebec that year was 27,702,344 feet, of which the quantity exported was 24,223,000 feet. The temporarily favorable conditions of the trade resulted in a considerable over-production in 1846 and the year following which, coupled with a falling off in the British demand, created a serious depression in the industry.

The regulations then in force in the Crown Lands Department contributed not a little to unduly stimulate production by requiring the manufacture of a large quantity of timber on every limit, regardless of the requirements of the market or the convenience of the operator, upon penalty of forfeiture of the limit. At the same time the timber production of New Brunswick was very greatly increased, coming into competition with the Canadian output, while the general commercial depression in Britain caused a great falling off in consumption.

Lumber Trade Commission.

On January 30th, 1849, the Legislative Assembly appointed a Select Committee, composed of Mr. Scott, of Bytown; Hon. Mr. La Terriere and Messrs. Egan, Johnson, Bell, Hall, Flint and Holmes "to enquire into and report upon the state of the Lumber Trade, the cause of its present depression, the protection of the forests from unnecessary destruction, and upon all other matters connected with the lumbering interest of this Province."

The evidence taken before this committee threw a good deal of light on the condition of the trade and the particulars in which a reform of the

license system was urgently required.

Over Production.

W. W. Dawson, a leading lumberman of Bytown, gave the following testimony:—"The first great blow then, which the trade received in 1846, was caused by over-production, for had the supply been in the proportion to the demand there is no reason to believe that prices would have ruled one fraction lower than they did in the previous year, nay, it is probable that they would have ruled higher, as, notwithstanding the high prices the British merchants paid for Canadian timber in 1845, they had found their dealings therein sufficiently satisfactory to induce them to increase their demand for it in 1846.

"In the two succeeding seasons, 1847 and 1848, although other causes entered into combination with it, the over-production of 1846, hanging like a dead weight on the market, still operated as a principal depressing Thus in 1847, including the quantity brought to market and the stock on hand, there was a total supply of 44,927,253 feet of square timber to meet a demand for 19,060,880, and in 1848 there was in like manner a total supply of 39,447,776 feet, to meet a demand for 17,402,360. The other causes which have combined to depress the trade in the two latter years, resolve themselves, so far as we are concerned, into one, viz., a decreased demand. The causes which have led to the decreased demand we have no control over, and I shall briefly advert only to what seem to be the most apparent. In the first place our own large export of 1845 and 1846 may have tended in some measure to overstock the British market; in the next place it would appear that an enormous supply has been thrown upon the market in these latter years from the Province of New Brunswick, quite unprecedented at any former period. What influence the Baltic trade may have had I am not very clearly aware, as it does not appear that at least of square timber, there has been any great increase of the quantity thrown upon the market from that quarter. The greatest and most apparent cause of all, however, is to be found in the diminished consumption arising from the depressed state of commerce in general in Great Britain and throughout the whole of Europe.

"It is therefore clear that the depressed state of trade was solely owing to over-production in 1846, and to that primary cause combined with a decreased demand in 1847 and 1848.

Objections to the System.

"I believe that there were other causes arising out of the pernicious influence exercised over the government of the trade by the absurd policy sometimes pursued by the Crown Lands Department (as it was then conducted), the particulars of which, as far as they relate to this question, may be classed under three heads, viz.:—

1. The order to manufacture a certain large quantity of timber upon

every limit, under penalty of forfeiture.

2. The threatened subdivision of the limits, and

3. The want of any equitable or decisive action on the part of the

Department with respect to disputed boundaries, etc.

"The first of these speaks for itself and needs no explanation, as it is evident that those who considered their limits valuable, or had invested large sums in their improvements would rather risk the remote and at that time unforeseen consequence of overdoing the trade, than yield any just title they possessed. It is at all events impossible to deny some influence to this cause, when we find these two facts staring us in the face—first fact, the Government ordered the trade to be overdone-second fact, the trade was overdone.

"With regard to the second, the subdivision of the limits, there were indeed some who made light of or laughed at it, knowing that it would either be rescinded before it came into force, or that they could evade it, but a greater number were carried away by the idea that, as after a stated period they would have to give up a part of their limits, they ought to make the most of them while they had them, especially as the times were then good. It thus afforded an excuse for some and added stimulus to others, to increase their business; very few in the lumbering fever of that period, pausing to consider the ultimate consequence.

The Right of Might.

"The third of these causes may appear a strange one, but it is easily explained. There were cases of disputed boundaries which for want of any decisive action on the part of the Government, even when applied to by all the parties, resulted in appeals to physical force. This, of course, induced the parties who struggled for a physical superiority in these remote parts entirely beyond the reach of law, to double, treble, or quadruple the number of men they would otherwise have employed, and as such a force, when on the ground, would of course be used to the most advantage, they would thus double, treble, or quadruple the quantity they would otherwise have manufactured. That this has been the case to some considerable extent I am positively aware, as I could point to one instance in which certain parties who would not otherwise have got out but a limited quantity, but who were by this means forced into a business of half a million feet or upwards. While, therefore, the rage for lumbering consequent upon the large profits of 1844 and 1845, must be allowed to have been the main cause of the over-production, these other causes aided very materially in producing that result."

In reply to the question—"Do you conceive that there is any danger of a monopoly of licenses to cut timber on the waste lands of the Crown.

What means can be taken to prevent it?" Mr. Dawson said:

Right to Renewal.

"There is no danger of a monopoly of the waste lands of the Crown on the Ottawa, the extent being too great to permit of the possibility of such a thing, but there is danger of monopoly occurring, as it has already occurred in particular instances. The remedy is easily applied as it only requires that the title to the renewal of license should depend upon actual occupation. This has hitherto been the rule, but the standard of occupation has been too high, thereby injuring the trade materially while in particular instances the object has been defeated by making special cases in which the rule was not enforced. I think that this question might be favorably affected by a change in the present system of deposits, which would at the same time afford a very considerable degree of relief to those engaged in the trade.

Ground Rent Proposed.

"At present a deposit of one-fourth of the duty on the quantity required to be taken out, is exacted on the issuing of every license for the season's operations, the amount being remitted the next year upon the collection of the duty on the actual quantity which may have been cut. Instead of this I would propose that a ground rent of 2s. 6d. per square mile, as a final payment should be levied annually for every limit upon issuing the license for that year's business; as a preventive of monopoly I would then double the ground rent in case of non-occupation, and continue doubling it every year the limit remains unoccupied. I would scarcely venture in the present state of trade to propose the ground rent system, if it were to constitute an additional impost upon the trade, but if a corresponding degree of relief could be afforded in any other way it would be most satisfactory and efficient."

With regard to the size of the timber limits Mr. Dawson, referring to a notice published in the Official Gazette in 1846, that after the 1st of May, 1849, all limits of a larger extent than five miles should be so subdivided that none should exceed that size, expressed himself as follows:—

"The object of reducing the size of all limits to five miles, I believe to have been pretty much the same as that of the clause requiring the manufacture of a large quantity, viz., to make every space of five miles for which license should issue produce a raft of timber annually, a theory which, I should hope, has been sufficiently exploded by its bitter effects. When the trade is in a prosperous condition, the profits are sometimes very large, and this naturally gives rise to an excessive spirit of speculation, which speedily brings ruin upon all concerned. A wise policy, therefore, would rather supply some check upon, than add a stimulus to, this speculative spirit, by discouraging instead of facilitating and urging on an over production, especially as it is hardly possible to conceive of any danger to the opposite extreme, as the facilities will always be such in spite of any discouragement, as to keep the supply in excess of the demand."

Speaking of the system then in vogue of estimating and collecting tim-

ber dues Mr. Dawson said:

Unfair Measurements.

"Anything more unjust in its principles and application or more expensive in its operation could scarcely be invented." He proceeded to give a striking illustration of its unfairness, selecting the duties upon red pine, the principle, as he remarked, being the same as regards all kinds of tim-

ber. The amount of duty levied on red pine was one penny per cubic foot, the timber not being measured but only counted, and the amount made up

from a fixed and arbitrary average of 38 feet per stick.

"The real average of the red pine rafts taken to Quebec varied from 26 feet or under to 50 feet or upwards per stick, the large being charged precisely as much duty as the small. In one instance a raft of the largest sized red pine ever seen there averaged 68 feet per stick. One of the rafts

of small timber the previous season averaged 26 feet per stick.

"The owner of the large raft, assuming the duty to be a penny per foot, had exactly thirty feet in every stick for which he had to pay nothing, while the owner of the small raft had to pay for twelve feet more on every stick than it actually contained." Considering the duty as a charge ad valorem he went on to show that as the large raft was sold for 1s. 3\frac{3}{4}d. per foot, and the small raft for 5d. per foot, the owner of the former paid about 3\frac{1}{8} per cent. of the whole proceeds of his timber to the Government, while the proprietor of the small timber was taxed something over 29 per cent. on its value. This was admittedly an extreme case, but the principle which rendered such a discrepancy possible operated throughout—Mr. Dawson went on to say:

"The remedy for this, as far as making the burden fall more equally upon those paying Crown dues for their timber, is very simple, and would consist in collecting the amount according to the actual number of feet instead of on the number of pieces as now practised. . . . There is, however a more important measure in view which should supersede all the abuses of the present system, and at the same time afford a great degree of relief to the trade at large. This measure is the same as that now in force and which has been found to work so well in New Brunswick, and should consist in imposing a small duty on all timber clearing at the Custem House, which with the proposed ground rent, would stand in lieu of all present charges. One shilling per ton in this way would produce a much larger revenue than that now derived from timber."

Nearly all the lumbermen examined, including John Porter and Joseph Aumond, of Bytown, Peter Aylen of Aylmer, and Ruggles Wright of Hull, agreed in advocating a ground rent on timber limits in order to prevent monopoly, some favoring five shillings per square mile, while others were disposed to consider 2s. 6d. sufficient. They were practically unanimous as regards the injustice of the system in vogue, and the facilities it presented for fraud, while as to the size of the limits there appeared to be

much difference of opinion.

William Harris, of Bytown, pointed out how the system of levying dues entailed a loss to the revenue and encouraged wasteful methods of lumbering.

Square Timber and Fires.

"After all the large timber is cut off a limit, so many trees, blocks, chips, etc., are down on the ground, that pine woods are subject to and are frequently destroyed by fire; thus young and small timber reserved in the woods is totally destroyed; whereas had the lumberman been induced to cut it in the first place by an ad valorem duty, he would avail himself of his opportunity, of his advantage to do so, for railroad framing, lathwood and other purposes where small lumber can be employed. Under the existing system an immense revenue is lost to the Crown, and a serious drawback is inflicted on the lumberman. Under this system, as large dues are exacted for the smallest tree as the largest—a tree of 12 or 14 feet would be as expensive to cut as one of 60, which amounts to prohibition of cutting

small timber. Were an ad valorem duty imposed instead of the present dues, a considerable amount of duty for masts and spars, over the amount collected would be obtained. Instead of paying 3s. 2d. for a stick available for masts worth say £20, one-eighth per cent. should be obtained, and for a red pine spar worth £10 a like per centage, which would make ā material difference in favor of revenue derivable from this source. Spruce, black birch, hackmatack for sleepers for railroads, and other small timbers would be taken also, which are now rotting in the woods. Spruce would do for booms, birch for cabinet work, and very large quantities of this species of timber is to be met with very far north on the Ottawa,

Suggested Changes.

hitherto untouched. * * * Under the present system, dealers in square timber pay 2s. 11d. for every tree—the dealer in sawed lumber 1s. 3d., making a difference in the revenue of 1s. 8d. to the tree, and frequently more, as all trees do not produce three standard logs—a loss arises to the revenue by counting logs instead of measuring them; the square timber manufacturer takes the whole of the tree, the deal manufacturer nothing but the clearest stuff, leaving all trees and parts of trees having the slightest appearance of knot or flaw in the wood abandoned to rot or fire. An advantage over the square timber maker should be had by the deal maker, inasmuch as he spends in his business in the country, more capital than the square timber maker, but not to the unfair extent now existent."

The first Report presented by the Select Committee on the Lumber Trade, considered the question of the establishment of a boom or depot at Quebec for the reception or safe-keeping of rafts on their arrival at that port, recommending such a step on the ground that the existing booms or depots were in the hands of parties interested in the shipping trade, who took advantage of their position in compelling the payment of such dues as they thought proper, and having an understanding with each other injurious to the manufacturer and restrictive of trade.

The Second Report, in which the broader question in connection with the regulations of the Lumber Trade and the cutting of timber on the pub-

tic domain are dealt with, is as follows:

COMMITTEE ROOM, 18th April, 1849.

Your Committee, in the prosecution of their inquiries, have taken considerable pains to ascertain the state of the lumber trude, and the causes which have tended to its present ruinous condition. The general depression of all commercial matters, both in this Province and in Europe, has of course operated injuriously upon the trade, but Your Committee conceive that much might have been done by a more judicious management of the waste lands of the Crown (from which a large proportion of the timber taken to market is obtained) by wholesome regulations for the granting of licenses, by a more equitable exaction of duty, and by less oppressive duties upon articles imported for the exclusive use of the trade.

Important Report.—Uncertain Tenure.

From the evidence adduced it appears to Your Committee that the present depression of trade has been caused by the over-production of 1846, to the extent of 13,000,000 feet: in the fall of 1847 the surplus remaining in Quebec was still greater; in 1848 it had but slightly diminished, and it is likely for the next year, and probably longer, to have an injurious effect

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upon the trade; this great increase of manufacture, no doubt, was induced by the enormous profit of 1845, and the supposition that large quantities of our timber would be required in the construction of railroads then projected in Great Britain and other parts of Europe. Another cause of increase in the manufacture, which however would apply chiefly to the Ottawa country, was a regulation of the Crown Lands Department requiring the manufacture of a certain quantity of timber on each "limit" whether or not it suited the occupier, under penalty of forfeiture. The tenure of the "limits" was also of so uncertain a nature that many of the holders were induced to manufacture as much as possible with a view of deriving the full advantage from their improvement so that they might, before forfeiture or change of system, have manufactured all the timber fit to be taken to market, and thus have defeated propositions then mooted for the division and re-granting of all limits held under Crown licenses from year to year; both of the above regulations have been suspended for the last two years, but not until the consequences had been severly felt, and the effects of which are still apparent in the large stock of timber on hand, and which has been a dead weight on the trade since 1846.

Your Committee can suggest no remedy to prevent over-production: the ease with which the quantity of timber can be increased, resulting from the unlimited extent of the lumbering country, and the fact that little or no mechanical skill is required in its manufacture, renders its production commensurate only with the means of the manufacturer and some few natural causes, such as the fall of snow, spring floods, etc., etc.

Ground Rent and Export Duty.

Your Committee are, however, of the opinion that the plans suggested by several witnesses examined before them, of abolishing the present system of granting licenses, having due regard to the rights of the present occupants, and the issue upon the terms of a ground rent, as proposed by Messrs. Aumond, Porter, Dawson, Russell and others, and the adoption of an export duty in lieu of the present charges, as now in use in the Province of New Brunswick, would have the effect of relieving the manufacturer from the oppressive burden of deposits on the issue of licenses and the payment of the duty on the timber reaching the market or soon after, without having any or much effect upon the revenue or the rights of private parties owning timbered lands.

In the event of this plan being considered impracticable, Your Committee begs leave to suggest an alteration in the collection of duty, by the substitution of actual measurement instead of the system now in use, of the payment of so much per stick, without reference to its size; this would have the effect of equalizing the duty on all sizes of timber, whereas at present the stick containing one hundred feet or more pays no more to the revenue. than the one containing twenty feet or less, although the large stick is often one-third more valuable per foot than the small one; an increase in the revenue would thus be gained, and an impetus be given to the manufacture of the smaller sizes of timber for railroad and other purposes, which cannot at present be profitably manufactured, and which leads to the destruction of the larger sizes of timber for uses for which the smaller kind would suit as well, and which the present system prevents being manufactured; nor would the manufacture of small timber have the effect of destroying forests from which supplies of large timber might be drawn, as it is a fact that in many situations there are large tracts of country covered with small

timber, which has arrived at its full growth, and might be a source of wealth to the lumberman and revenue to the Province, if its manufacture

was not virtually prohibited.

Your Committee would also suggest the reduction of the present establishment for the collection of timber duties, and the management of Slides upon the Ottawa, and the remodelling of the various offices, as suggested by the evidence of the parties above referred to, by which a saving to the Province of upwards of £1,000 per annum might be effected.

All of which is respectfully submitted.

John Scott, Chairman

THE FIRST CROWN TIMBER ACT.

The immediate outcome of the action of the Select Committee was the adoption, during the same session, of the first Canadian Legislative enactment on the subject of timber licenses, which, with the regulations of the Crown Lands Department, issued in accordance with its provisions, practically forms the point of departure from which our present system has been developed. It has, therefore, been considered advisable to present both in full, together with the form of license appended to the regulations.

An Act for the Sale and Betterment of Timber upon the Public

Lands: -

Regulations Subject to Change.—For One Year Only.

"Whereas it is deemed expedient and proper to provide by law, as well for the sale of the Timber growing on the Public Lands of the Province, as for the protection of the said timber against the frequent and extensive depredations committed upon it in various parts of the Province: Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice of the Legislative Council and of the Legislative Assembly of the Province of Canada, constituted and assembled by virtue of and under the authority of an Act passed in the Parliaments of the Province of Upper and Lower Canada, and for the Government of Canada, and it is hereby enacted by the authority of the same: That it shall and may be lawful for the Commissioner of Crown Lands, or any officer or agent under him, duly authorized to that effect, to grant licenses to cut timber on the ungranted lands of the Province at such rates and subject to such conditions, regulations and restrictions as may from time to time be established by the Governor of the Province, by and with the advice of the Executive Council, and of which due notice shall be given in the Canada Gazette. Provided always that no license shall be so granted for a longer period than twelve months from the date thereof: And provided further that if in consequence of any incorrectness of survey, or other error or cause whatsoever, a license shall be found to cover grounds already included in a license of a prior date, the license last granted shall become null and void in so far as it may interfere with the one previously issued, and the holder or proprietor of the license so rendered null and void shall have no claim whatsoever upon the Government for indemnity or compensation by reason of such cancellation.

2. And be it enacted. That the licenses so granted shall describe as accurately as circumstances will permit the ground or grounds upon which the Timber shall be cut and shall be held to confer. for the time being, on the nominee, the right to take and keep possession of the premises described to the exclusion of all other parties, subject to such regulations and restrictions.

tions as may be established; and such licenses shall have the effect of vesting in the holders or possessors thereof all rights of property whatsoever in all such trees, timber and lumber as shall or may be cut upon or within the limits of any such license during the term thereof, whether such trees, timber and lumber shall have been cut by or under the authority of the holder or proprietor of such license, or by any other person, with or without his consent, and such licenses shall be deemed sufficient authority to entitle the holders or proprietors thereof to seize or cause to be seized by way of re-vendication, saisie re-vendication, or otherwise, such trees, timber or lumber, where the same shall be found in Canada in the possession of any unauthorized person, and shall be deemed sufficient authority to institute any action or suit at law or equity against any wrongful possessor or trespassers, as well as to prosecute all trespassers and other offenders to punishment, and to sue for and recover damages if any shall have been sustained, and all proceedings pending at the expiration of any such license shall or may be continued and carried to final termination in the same manner as if said license had not expired.

3. And be it enacted, That all persons obtaining licenses shall, at the expiration of said license, make to the officer or agent granting the same, or to the Commissioner of Crown Lands, a return of the number and kinds of trees cut, and of the quantity and description of sawlogs, or of the number and description of sticks of square timber he has manufactured and carried away under such license, which statement shall be sworn to by the proprietor of the license, or his agent, or by his foreman or principal man, before one of the justices of the peace, who are hereby authorized to administer all oaths required by this Act; and persons refusing or neglecting to furnish such statement, or evading or attempting to evade any regulation hereafter to be established by Order-in-Council, shall be held to have cut without authority, and the timber made shall be dealt with accordingly.

Subject to Seizure.

- 4. And be it enacted, That all timber cut under licenses granted shall be held liable for the payment of the dues established thereon, so long as and wheresoever the said timber, or any part of it, may be found within the limits of the Province, whether in the original logs or manufactured into deals, boards, or other stuff, and it shall be lawful for all officers or agents entrusted with the collection of such dues to follow all such timber and seize and detain the same wherever it may be found until the dues are paid or satisfactorily secured.
- 5. And be it enacted, That bonds or promissory notes, which may be taken for the amount of dues either before or after the cutting of the timber, as collateral security or to facilitate collection, shall not in any way affect, or invalidate the lien of the Crown on any part of the timber, but the lien shall subsist in full force until the dues are actually discharged.
- 6. And be it enacted, That if any timber so seized and detained for non-payment of dues, shall remain more than twelve months in custody of the agent or person appointed to guard the same, without the dues and expenses being paid, then it shall be lawful for the Commissioner of Crown Lands, with the previous and special sanction of the Governor-in-Council to that effect, to order a sale of the said timber to be made after sufficient notice, and the balance of the proceeds of such sales, after retaining the amount of dues, and costs incurred, shall be handed over to the owner or claimant of such timber.

Trespass.

7. And be it enacted, That each and every person who without competent authority shall cut, or who may employ or induce any other person or persons to cut, or who shall assist in cutting any timber of any kind whatsoever, on any of the Crown, Clergy, School or other Public Lands of the Province, or who shall remove or carry away any Merchantable timber of any kind so cut from any of the Public Lands aforesaid, shall not acquire any right to the timber so cut, or claim to any remuneration for cutting, or preparing the same for market, or for conveying the same to or towards the market, but he shall in addition to the loss of his labor and disbursements, forfeit a sum of fifteen shillings for each and every tree, rafting stuff excepted, which shall be proved he cut or caused to be cut or carried away, which shall be recoverable with costs, at the suit, and in the name of the Commissioner of Crown Lands or resident agent, in any Court having jurisdiction in civil matters to the amount of the penalty; and that in all cases under this Act, it shall be incumbent on the party charged to prove license or authority to cut and the averment of the party seizing or prosecuting that he is duly employed under the authority of this Act, shall be deemed sufficient proof thereof, unless the defendant shall prove to the contrary; provided always that the penalty of fifteen shillings per tree shall only be recoverable when the timber or saw logs made have been removed out of the reach of the officers of the Crown Lands Department or it shall otherwise be found impossible to seize the same.

8. And be it enacted, That whenever satisfactory information supported by the affidavit of one or more persons, made before a Justice of the Peace or before any other competent party, shall be received by the Commissioner of Crown Lands or any other officer or agent of the Crown Lands Department, that any timber or quantity of timber has been cut without authority on Crown, Clergy, School, or other Public Lands and describing where the said timber may be found, it shall and may be lawful for the said Commissioner. officer or agent, or any one of them, to seize, or cause to be seized, in Her Majesty's name, the timber so reported to be cut without authority, wherever it may be found within the limits of the Province, and to secure and place the same under proper custody, until such time as a decision can be had in the matter from competent authority; Provided always that whereever the timber so reported to have been cut without authority on the public Lands aforesaid, without license, has been made up with other timber into a crib, dam or raft, or in any other manner has been so mixed up at the mills or elsewhere, as to render it impossible or very difficult to distinguish the timber so cut on the lands aforesaid without license, from other timber with which it may be mixed up, the whole of the said timber shall be held as having been cut without authority on Public Lands, and be liable to seigure and forfeiture accordingly until satisfactorily separated by the holder.

9. And be it enacted, That it shall and may be lawful for any such officer in the discharge of his duty to call in such lawful aid and assistance in the name of the Queen as may be necessary for securing and protecting the timber so seized: and if any person or persons whatsoever, shall, under any pretence, either by actual assault, force or violence, or by threat of such assault, force or violence, in any way resist, oppose, molest or obstruct any officer, or person acting in his aid or assistance, in the discharge of his or their duty, under the authority of this Act, such person or persons being convicted thereof shall be adjudged guilty of felony and shall be punishable accordingly.

- 10. And be it enacted, That if any person or persons whatsoever, whether pretending to be the owner or not, shall either secretly or openly, and whether with or without force or violence, take or carry away, or cause to be taken and carried away, any timber which shall have been seized and detained as subject to forfeiture under this Act, before the same shall have been declared by competent authority to have been seized without due cause, or without permission of the officer or person having seized the same, or of some competent authority, such person or persons shall be deemed to have stolen such timber, being the property of Her Majesty, and to be guilty of felony, and liable to punishment accordingly; And that whenever any timber shall be seized for non-payment of duties, or for any other cause of forfeiture, or any prosecution shall be brought for any penalty or forfeiture under this Act, and any question shall arise whether the dues have been paid on such timber, or whether the said timber has been cut on other than any of the Public Lands aforesaid, the burden of proving payment, or on what land the said timber has been cut, shall lie on the owner or claimant of such timber, and not on the officer who shall seize and stop the same or the party bringing such prosecution.
- 11. And be it enacted, That all timber seized under this Act shall be. deemed and taken to be condemned, unless the person from whom it was seized, or the owner thereof, shall, within one calendar month from the day of the seizure, give notice to the seizing officer, or nearest officer or agent of the Crown Lands Office, that they claim or intend to claim the same: failing such notice the officer, or agent seizing or causing to be seized shall report the circumstances to the Commissioner of Crown Lands, who shall or may order the sale of the said timber by the said officer or agent, after a notice on the spot of at least thirty days; Provided always that it shall and may be lawful for any Judge having competent jurisdiction, whenever he may deem it proper to try and determine such seizures, and to order the delivery thereof to the alleged owner on receiving security by bond with two good and sufficient sureties, to be first approved by said agent, to pay double value in case of condemnation, which bond shall be taken to Her Majesty's use in the name of the Commissioner of Crown Lands, and shall be delivered up to and kept by such Commissioner, and, in case such seized timber shall be condemned, the value thereof shall be forthwith paid to the Commissioner of Crown Lands, or agent, and the bond cancelled; otherwise the penalty of such bond shall be enforced and recovered.
- 12. And be it enacted, That if any wilful false oath be made in any case where, by this Act, an oath is required or authorized, the party wilfully making the same shall be guilty of wilful and corrupt perjury, and be liable to the punishment provided for that offence; and any persons availing themselves of any false statement or oath to evade the payment of duties shall forfeit the timber on which duty is attempted to be evaded.
- 13. And be it enacted, That parties maliciously cutting or loosening Booms, or breaking up or cutting loose Rafts or Cribs, shall be guilty of a misdemeanor, punishable with fine and imprisonment of not less than six months.
- 14. Provided always and be it enacted, That nothing in this Act contained shall be construed as in any way invalidating or affecting licenses already granted or any obligation contracted for payment of dues under such licenses, or to invalidate or affect the lien of the Crown on any timber cut upon Public Lands now within the limits of the Province, and upon which the dues heretofore exacted have not been paid, notwithstanding any bond or promissory note which have been taken for the amount of such dues.

REGULATIONS.

Department of Crown Lands, Montreal, 5th September, 1849.

Notice is hereby given that from and after the First of October next Licenses agreeable to the accompanying form will be granted, at all seasons, to cut timber on the vacant lands of the Crown, subject to the following conditions and regulations, sanctioned by His Excellency the Governor General in Council, in addition to the requirements of the Act, 12 Vict., Cap. 30:

Ist. For the River Ottawa and its tributaries above Bytown, including the districts of Bathurst, Dalhousie and that part of the Midland District lying north of the townships of Bedford, Hinchinbrooke, Kennebec and Kaladar, applications are to be made in writing to James Stevenson, Esquire, Crown Timber Office, Bytown, and for other parts of the Province to the respective Crown Land Agents, distinctly describing the space or limits for which the license is required, and furnishing sketches when required, connecting with known points, and drawn to scale.

Size of Berths.

2nd. No timber berth or location will be licensed in unsurveyed lands exceeding 10 miles in length by 5 miles in depth, or exceeding an area of 50 square miles, and half that size in surveyed townships; in the latter case, the lots and concessions required will have to be specified, limits to be confined to one side of rivers wherever practicable. All licenses to expire on the 30th April following the date thereof. Consecutive limits may be held by the same individual.

3rd. The timber cut shall be paid for at the following rates:

Crown Dues.

White pine square timber	$\frac{1}{2}$ d. per foot.
Red pine square timber	
Basswood and cedar	1d. per foot.
Oak	11d. "
Elm, birch and ash	1d. "
Ccrdwood (hard)	8d. per cord.
Cordwood (soft)	4d. "
Red pine logs, 12 feet long	7d. per log.
White pine logs, 12 feet long	5d. ''
Spruce	$2\frac{1}{2}$ d. "
Each stick of white pine to be reckoned as containing	70 cubic feet.
Red pine	38 "
Oak	34 "
T31 1 1 1 1 1 1	34 "
Cedar and basswood	34 "

Railway timber will be taken at actual measurement, provided it does not average more than half the regular size, or on the party exhibiting a contract and specifications for such timber corresponding to the timber in his raft.

All square timber, logs, deals, boards or other stuff made up into rafts or cribs, or leaving the district in any other form, to be submitted to counting or actual measurement whenever it may be deemed advisable.

Statements under oath to be furnished of the kinds and quantities of tim-

ber and logs cut and carried away.

Amount to be Cut.

4th. Applicants for license will be required to make a deposit of one-fourth of the duty on the quantity of timber to be made, which is to be estimated at the rate of 500 feet per square mile, or on the quantity proposed to be made, if greater, giving bonds with security for the remainder. No license to be estimated for less than 2,000 feet of timber. Saw log limits to be estimated as square pine timber.

Applicants neglecting to comply with this condition within the period of three months in the Bytown Timber Office, and one month in any other agency, from the date of the receipt of their application, will lose the claim to the limits, which will fall to the next applicant. Deposits will in no case be returned, and only allowed in reduction of dues the first or second season after the date of the License, and not afterwards. Licenses granted on erroneous descriptions or sketches furnished by applicants may be declared null and void by the office, whenever deemed necessary, and parties carrying on operations under such licenses after being required to desist will be considered as trespassers and subject to the penalties of the Timber Act.

Transfers.

5th. Transfers of limits to be in writing and if not found objectionable by the Crown Lands Department or Timber Agent, to be valid from the date on which they may be deposited in the hands of the latter, but no transfer to be valid until after one year's actual occupation by the parties transferring them. It being however well understood that in granting Timber Licenses the Government contract no other obligation than that of allowing the party concerned to cut and carry away the quantity of timber mentioned in the license if found within its limits.

Squatters.

6th. Squatters or other occupants of land without authority cutting timber or saw-logs thereon without License (except for the necessary building or clearing and fencing) or others doing so by their permission, will be subject to the penalties established by law for cutting timber without a license. Timber cut on land being purchased, but not all paid for, to be collected by Government in part payment of the land.

7th. Persons refusing or evading the payment of slide dues or duties on their Timber, or the final settlement of bonds for the same before giving it away, or in any default with the office;—also persons taking violent possession of disputed grounds before obtaining a decision in their favor, and parties refusing to comply with the decisions of Courts or of Arbitrators or the regulations of this Office—or who forcibly interrupt surveyors, shall be refused further licenses and their limits become disposable to others on the expiration of their licenses.

Claims to Renewal.

8th. Licentiates who shall have duly occupied their limits, and who shall have strictly complied with all the requirements of the office, will be considered as having a claim to the renewal of their license in preference to all others, on their making application to that effect in writing, on or before the 31st May, and depositing the money and bonds required on or before the 30th September (excepting that for this season they will be received until the 31st December) failing which the limits to be considered vacant, and to be disposable by Public Sale on the 10th day of October following, or subsequently to the first applicant.

Proof of Occupation.

9th. Unless in seasons excepted by special notice, limits upon which the holder will make less than an average of 500 feet of timber, or 20 saw logs per square mile, or upon the entire extent of which (if less than four superficial miles) he will make less than 2,000 feet of timber, or less than 100 saw logs, shall be considered as not having been duly occupied, and will, after the former owner has had an opportunity of being heard in opposition, be granted to the first applicant pleading such non-occupation, on or before the 31st May, and proving same by the Certificate of a sworn surveyor on or before the 31st July following. Should the statement on oath required by the Timber Act not be made when required, or should it show that the limits have not been duly occupied, a surveyor's certificate will not be required. Provided, however, that if 250 feet of timber or 10 saw logs are proved to have been made per square mile, the holder of the said limit shall be entitled to retain one-half of the same, which shall then be divided under the directions of the office at the expense of the former holder, into two equal halves of which the said holder shall have his choice. leaving the remainder to the new applicant.

10th. Parties having rivers to clear or other improvements to make to render their berths available, will be considered as having duly occupied the same, if they establish to the satisfaction of the office, having laid out in such improvements during the season a sum averaging at least £6 per square mile, and provided that the entire amount be not less than £24.

even for the smallest limit.

Licenses to be Renewed

N. B.—Present holders of timber berths under license will be entitled on the foregoing conditions to renew their licenses for the same, on subdividing such as may exceed the extent sanctioned by the present regulations, and making their applications on or before the 31st of May next; but all renewals of licenses shall be subject to such modifications as may be found necessary to settle or obviate disputes.

FORM OF LICENSE.

By authority of the Hon. the Commissioner of Crown Lands for the Province of Canada, and for and in consideration of the payments made and to be made to Her Majesty as secured by a bond of this date; I do hereby give unto

and unto

Agents and Workmen full power and license to cut

upon this Location described on the back hereof by

and to hold and occupy the said Location

to the exclusion of all others, except as hereinafter mentioned from to 30th April, 18, and no longer, with the right of conveying away said timber through any ungranted or waste lands of the Crown.

And by virtue of this License, the said Licentiate has a right by the. Provincial Statute 12th Vic. Cap. XXX, to all timber cut by others in trespass on the ground hereby assigned, with full power to seize and recover the same anywhere within this Province aforesaid. But this license is sub-

ject to the following conditions, viz.:-

That any person or persons may at all times make and use roads and travel over the ground hereby licensed, and cut and take therefrom any trees necessary to make floats, traverses, oars and withes for use in rafting.

That nothing herein shall prevent any person or persons from toking standing timber of any kind to be used in making Roads or Bridges or for

Public Works.

And that persons settling under lawful authority or title within the location, hereby licensed, shall not in any way be interrupted by the said Licentiate or any one acting for or by permission.

And further, under condition that the said Licentiate or representatives shall comply with all Regulations that are or may be established by Order in Council. and shall submit all the timber cut under this License to be counted or measured and settle for the duties chargeable thereon when required by me or any Officer thereunto authorized, otherwise the said timber will be forfeited to the Crown, and the said Licentiate be subject to such other penalty as the Act provides.

Given under my hand at , this day of in the year of our Lord one thousand eight hundred and (Signed)

Collector of Crown Timber Duty.

It will be seen that the new regulations, while retaining the provision requiring the manufacture of a certain quantity of timber each year on every limit, did much to rectify abuses and prevent over-production by practically giving the license-holder a preferential claim to the renewal of his license, upon compliance with the conditions, and making the taking forcible possession of disputed territory and refusal to comply with the decision of courts or arbitrators punishable by the refusal of license. An attempt to remedy the unfairness of the mode of levying dues, by which the smaller-sized timber paid so much more in proportion than the larger sticks, is indicated by the somewhat elastic provisions of the third clause of the regulations providing for the counting or actual measurement whenever it may be deemed advisable. The provision calling for the manufacture of 500 feet of timber per square mile as a condition of occupancy, while theoretically objectionable, was hardly likely to work much practical injury to the trade, modified as it was by the saving clause under which it might be dispensed with for any season by special notice. The fact of it having been so suspended for two years previous to the adoption of the Act, in consequence of an over-stocked condition of the market, and that attention had been fully directed to its possible injurious effects if maintained during periods of business depression, rendered it comparatively innocuous for the

The essentially characteristic and valuable feature of this legislation was, however, the greater stability and permanence attaching to the lumberman's business and interest in the limit secured. By rendering him practically assured of a renewal of his license so long as he chose to comply

with the regulations laid down from time to time, and equally secure in the possession and working of his limit, without having to maintain his claim by physical force against his rivals, it lessened the temptation to reckless over-production and unsystematic, wasteful methods of operation.

In 1851 a conspicuous advance was made by the issuing of new regulations, which, while framed on the same general lines as those of 1849, contained several new provisions of importance, aimed at some of the abuses that had been indicated by the investigation which preceded the Act of 1849.

The following are the regulations in full:

PROVINCE OF CANADA.

CROWN LANDS DEPARTMENT,

Toronto, 8th August, 1851.

NOTICE is hereby given, that from and after the date hereof, LICENSES agreeably to the accompanying form, will be granted, at all seasons, to cut timber, on the Vacant Lands of the Crown, subject to the following conditions and Regulations, sanctioned by HIS EXCELLENCY THE GOVERNOR GENERAL in Council, by Order dated the Seventh instant, in addition to the requirements of the Act 12th Vic., Cap. 30. And the Regulations of the 5th September, 1849, and 15th March, 1850, are hereby superseded.

1st. Applications for Licenses to cut timber on the vacant Lands of the Crown on the River Ottawa and its tributaries from the Gatineau, and the Townships of Hull and Wakefield inclusively, upwards; and the Counties of Lanark, Renfrew and Carleton, and that part of the Counties of Frontenac, Lennox and Addington north of the Townships of Bedford, Hinchinbrooke, Kennebec and Kaladar—are to be made to A. J. Russell, Surveyor of Crown Timber Licenses, Bytown; and in other parts of the Province to the respective Crown Land Agents.

2nd. Applications must be in writing, distinctly describing the space or stating the lots of land for which license is required, the applicants furnishing sketches of the limits asked when required, connected with known points, and drawn to scale. No timber berth shall be licensed in unsurveyed lands, exceeding ten miles in length, by five miles in depth, nor exceeding an area of fifty square miles, and half that size in surveyed townships, in the latter case the lots and ranges to be stated—berths to be confined to one side of rivers, wherever practicable. All licenses to expire on the 30th of April following the date thereof. Consecutive berths may be held by the same individual.

V
3rd. The timber cut shall be paid for at the following rates, viz.:
Oak and Walnut per cubic foot
Red Pine, Elm, Birch, Ash and Tamarac
White Pine, Basswood, Cedar, Spruce, etc
Red Pine Saw Logs, 12 feet long, per log
White Pine do do 5dl
Spruce do do $\frac{2i}{2}$ d
Cord Wood, (hard) and Lath Wood per cord
do (soft) per cord
Each stick of White Pine to be reckoned as containing 70 cubic feet.
Each stick of Red Pine to be reckoned as containing 38 cubic feet.
All other kinds of wood as containing 34 cubic feet

Railroad timber to be taken at actual measurement, provided it does not average more than half the regular size, or on the party exhibiting a contract and specification corresponding with the timber in his raft.

All Saw Logs cut in future upon Public Lands, if exported from the Province, shall be paid for at double the rates mentioned above respectively.

4th. All Square timber, Logs, Deals, Boards or other Stuff leaving the Agency in which it is cut in any form, must be submitted to counting or actual measurement whenever required and statements under oath must be furnished of the kinds and quantities of timber and logs cut under each license, when required by the Agent for the granting of licenses, or other

authorized person.

5th. Parties cutting timber on Public Lands, before moving any raft or parcel of timber (whether cut on Public or Private lands) from the Agency in which they held license, shall make report thereof to the Collector of Crown Timber Dues or Agent; making, if required, declaration upon oath as to the number of pieces of each kind of wood in each raft or parcel, and the number of cribs; whereupon they shall obtain clearances from the Collector or Agent, stating the number of pieces in each raft-how many, if any, have been satisfactorily proved to be from Private Lands, and on how many, if any, the duties have previously or then been paid; and on the arrival of any such raft or parcel of timber at Quebec, or at any intermediate place or other port, for sale or shipment, the owner or holder of it shall make report thereof within forty-eight hours to the inspector of Rafts, Deputy Supervisor of Cullers, or other appointed officer, and in addition to the quantity shewn by the clearance as subject to duty, any surplus timber beyond the number of pieces stated herein, on being ascertained by the Inspector of Rafts, Deputy Supervisor of Cullers, or other authorized officer, shall be held as having been cut upon Crown Lands, and be subject to the payment of duties accordingly.

6th. Parties omitting to report the departure of their rafts or other timber from the Agency in which they held license, or the arrival thereof at Quebec, or other port or place for sale or shipment within the Province, as before mentioned, shall be refused further license, and be subject to the forfeiture of the timber for evasion of regulations, as provided in Section

3rd of 12th Vic., Cap. XXX.

7th. Hereafter on the issue of License to cut timber on Public Lands, a Ground Rent of Two Shillings and Sixpence for every superficial mile licensed, shall be exacted in addition to the established duties; and the deposit on account hitherto levied shall be discontinued. The Ground Rent shall be computed on the nearest approximation to the real areas of the timber berths, but on no license shall it be less than One Pound currency; and no claim for reimbursement of ground rent over calculated will be entertained after the issue of license.

8th. The ground rent to be exacted on the renewal of license shall be double that of the previous year if the berth has not been duly worked upon—increasing annually in that proportion while unoccupied, (excepting the year succeeding that in which the license has been first issued, if not in a surveyed township); reverting to the original rate on the berth being duly occupied; and the making of 500 feet of square timber or 100 saw logs per

square mile shall be considered as due occupation.

9th. No timber berth shall be forfeited for the non-occupation of it, provided the increased ground rent on that account be duly paid; but berths on which any increased ground rent is evaded by false statements as to occupation shall, (after the former holder has had an opportunity of being heard in opposition) be granted to the first applicant pleading such evasion and non-occupation on or before the 31st May, and proving the same by the

certificate of a sworn Surveyor, on or before 31st July following. If half occupation only be proved, the former holder may retain one-half of the berth after it has been equitably divided in the opinion of the Agent.

10th. Vacant berths are to be granted to the first applicants and be described in the licenses as—"not to interfere with prior licenses existing, or to be renewed in virtue of Regulations," but applicants for vacant berths must call for license and pay the required Ground Rent (giving satisfactory security for the payment of all duties that may accrue under the license) within three months of the receipt of their applications in the Bytown Timber District, and all other parts of the Province where the lands are not laid out into Townships or otherwise surveyed for settlement, and within one month in those portions of other agencies where the lands are surveyed or otherwise laid out for settlement; otherwise their applications will be void and the berths be grantable to the next applicants in succession. Ground Rent received to be returned to the applicant, should it be found that the berth asked cannot be made good to him.

11th. Licentiates who have complied with all the regulations, will be entitled to renewal of the licenses for their berths in preference to other applicants for them, if they apply in writing for such renewal before the 1st of June next ensuing their previous license, and comply with the conditions mentioned in last clause before the 1st November following; failing which, the berths they held will then become vacant and will be offered for sale on 10th November following to the highest bidder making immediate payment, and if not then sold, will be granted to the first applicant there-

after as usual.

12th. When two or more applications are received at the same time for the same ground, it shall be divided between the parties by lot,—should any of them wish it to be so, otherwise the right to the whole is to be determined by lot. But on Rivers, where the cost incurred for surveys or other causes may render it suitable, the preference to license for timber berths may be disposed of at such upset price as the Commissioner of Crown Lands may direct, and be awarded in whole, or in part, to the highest bidder at Auction making immediate payment, in case of clashing applications of

equal right.

13th. In the Bytown Timber District, and all other parts of the Province where the lands are not laid out into Townships or otherwise surveyed for settlement, when an applicant has been obstructed for a month or more by a prior application—(for the same ground)—that has become void, he is to be allowed one month in addition to the stated period to take out license, provided he applies in writing for such extension of time, within three months after the receipt of his application for license, and in those localities where, by the 10th clause of these Regulations, one month is the period for which an application is held good, ten days only shall be allowed

in addition, in case of ten days or more of obstruction.

14th. When an application cannot be decided upon till the result of some pending survey be known, or till it be projected, the applicant is to be allowed three months in the Bytown Timber District, and all other parts of the Province where the lands are not laid out into Townships, or otherwise surveyed for settlement, and one month elsewhere, to take out license, after the notification of the result, if in his favor, has been sent to his address; and when the explorations necessary for the preparation of the sketches required by these Regulations cannot without serious loss be effected without an extension of time, it may, on written application, be granted. Licenses granted on erroneous descriptions or sketches furnished by applicants, are to be subordinate to subsequent accurately described licenses.

and may be cancelled in whole, or in part, whenever deemed necessary; parties persisting in working under such licenses, after being required to desist, will be trespassers and subject to penalties as such.

15th. The Surveyor of Licenses, and the other Crown Timber Agents, shall keep registers of all applications for berths, licenses granted, and transfers thereof, which, with their plans of licensed limits and vacant ground, shall be open for public inspection; but no applicants shall be entitled to explanation as to applications subsequent to his own, for the same ground.

16th. The Surveyor of Licenses at Bytown and Officers thereunto authorized elsewhere, shall, at the written request of any party interested, issue instructions stating how the boundaries of timber berths should be run, to be in conformity with existing licenses. The surveys are to be performed at the expense of the parties requiring them, but the plans, reports and field notes thereof will be paid for and kept of record by the Surveyor of Licenses or Agent on their being examined and approved by him.

17th. In all cases of contestation as to the right to berths or the position of bounds, the opinion of the Surveyer of Licenses at Bytown, or Agent for granting licenses elsewhere, is to be binding on the parties, unless and until reversed by arbitration, within three months after notification of such opinion has been communicated to the parties (or their representatives on

the premises, or sent to their address) or by decision of Court.

18th. To prevent delay and disputes as to arbitrators, it shall only be necessary for the party thinking himself aggrieved by such opinion, to notify in writing to the officer who has given it, his dissent, and the arbitrator he has appointed; it shall then be the duty of the Surveyor of Licenses, or other authorized officer, to take the place of the arbitrator on the other part, and in the case of their not agreeing to an umpire, should one be required, the Commissioner of Crown Lands shall appoint one, at the joint expense of the parties, on the request of either of them, or either of the arbitrators.

19th. Transfers of berths to be in writing, and if not found objectionable by the Crown Lands Department or agent for granting of license, to be valid from the date on which they may be deposited in the hands of the latter; but no transfer to be valid till after one seasons actual occupation

by the party transferring them.

20th. Squatters or other occupants of land without authority, cutting timber or saw logs thereon without license (except for clearing, building or fencing thereon) or others doing so by their permission, will be subject to the penalties established by law for cutting timber without license.

21st. Persons refusing or evading the payment of Slide Dues or duties on their timber, or the final settlement of bonds for the same before giving it away, or in any default with the Crown Timber Officer or Agent; also persons taking violent possession of disputed grounds before obtaining a decision in their favor, and parties refusing to comply with the decisions of Courts, or of Arbitrators, or the regulations established by Order in Council, or who forcibly interrupt surveyors, shall be refused further licenses, and their berths become disposable to others on the expiration of their licenses.

22nd. The Collector of Crown Timber Dues or the officer in charge of the Bytown Timber District, may authorize any of the local Crown Land Agents to collect the duties on any timber or saw logs cut under license for local consumption or that may be sent to market, otherwise than by Bytown; and all such Agents whose Agencies, or any part of them, may be within or adjoining the Bytown Timber District, are authorized to seize any timber or saw logs cut without license within or passing through their Agencies, on the proceeds of which they shall receive their usual percentage for collection.

23rd. Licenses are to be granted on the annexed form. The clause at the foot thereof must be signed by Licentiate's Securities in place of the bonds formerly taken, and the description of the berth is to be written on the back of the license.

FORM OF LICENSE.

By authority of the Provincial Statute 12th Victoria, Chapter 30, and Regulations dated Eighth of August, 1851, and for and in consideration of the payments made, and to be made to Her Majesty:—I do hereby give unto Agents and Workmen full power and license to cut upon the location described on the back hereof by and to hold and occupy the said location to the exclusion of all others, except as hereinafter mentioned:—from to Thirtieth April, 18, and no longer; with the right of conveying away the said timber through any ungranted or waste Lands of the Crown:

And by virtue of this License the said Licentiate has right by the said Provincial Statute to all timber cut by others in trespass on the ground hereby assigned, with full power to seize and recover the same anywhere within this Province aforesaid.

But this License is subject to the following conditions, viz.:

That any person or persons may at all times make and use roads upon, and travel over the ground hereby licensed, and cut and take therefrom any trees necessary to make Floats, Traverses, Oars and Withes for his or their use in rafting.

That nothing herein shall prevent any person or persons from taking standing timber of any kind to be used for the making of roads or bridges, or for public works.

And that persons settling under lawful authority or title within the location hereby licensed shall not in any way be interrupted by the said Licentiate, or any one acting for or by

And further, under condition that the said Licentiate or representatives shall comply with all regulations that are or may be established by Order in Council, and shall submit all the timber cut under this license to be counted or measured, and settle for the duties chargeable thereon, when required by me or any other officer thereunto authorized, otherwise the said timber will be forfeited to the Crown, and the said Licentiate be subject to such other penalty as the Act provides.

Given under my hand at this day of in the year of Our Lord one thousand eight hundred and

Ground Rent....£

We have read and comprehend the nature of the obligations contained in this License, and we bind ourselves jointly and severally, and each of our Heirs, Executors, Curators and Administrators, to pay all duties that may become due and payable to Her Majesty, Her Heirs or Successors, on any timber cut or acquired by virtue of this License in the event of the above named Licentiate failing or refusing to pay the same, or to give satisfactory bonds for the payment thereof.

Penalty for not Working.

The principal change in the system created by the regulations was the imposition of a ground rent, a measure almost universally favored by practical lumbermen as the best means of preventing the monopolization of unworked limits. The deposit on account of dues was discontinued, and in case the comparatively small ground rent should be insufficient to prevent licensees holding their limits from year to year unoccupied, as might easily be the case should the limits be specially valuable and the market dull, it was provided that the ground rent should be doubled for every year that the limits remained unworked. The general principle of disposing of timber berths by grant to the first applicant, giving previous occupants who had complied with the regulations the preference, was left undisturbed.

Auction System Extended.

But a particularly significant modification was introduced by the 12th clause, providing that upon rivers where the cost of surveys rendered it advisable, preferences for licenses might be disposed of at an upset price fixed by the Commissioner of Crown Lands, and in the case of competition awarded to the highest bidder at auction. This is an important extension of the principle adopted in 1842, and an advance towards the adoption of the auction system as it now exists.

To Prevent the Export of Saw Logs.

Another noteworthy change in the law, interesting in view of the importance attaching to the same question in the course of recent legislation and diplomacy, was the provision that all saw logs cut upon public lands, if exported from the Province, should be paid for at double the ordinary rate. This subject had been brought to the attention of Parliament during the session of 1851, when on the 22nd of May petitions from N. McKinnon and other lumbermen and mill-owners of Bayham and surrounding townships, and from the municipality of Bayham were presented, asking for an export duty on unmanufactured pine logs and timber designed for foreign markets. The county of Middlesex also petitioned for measures to prevent the exportation of pine logs. On the 2nd of June the Hon. Mr. Sherwood brought the matter up by an inquiry of the Government as to whether they intended to propose such a duty, or to take any other steps to protect the timber manufacturers of the Province against the injurious practice, on the part of American citizens, of securing Crown Lands at a low rate for the purpose of cutting timber to be manufactured in their own country. Hon. Mr. Hincks' reply was to the effect that it was not the intention of the Government to propose an export duty on saw logs, but that steps had been taken to prevent the destruction of timber on the Crown Lands. The embodiment in the regulations of the clause respecting the double duty on saw logs cut for export was no doubt the result of this agitation, which appears to have excited very little public interest beyond the circle of those immediately concerned in the trade.

Increased Revenues.—Red Pine Values.

The beneficial effects of the more stringent policy inaugurated by the new regulations, were not long in manifesting themselves. There was an immediate and considerable increase in the revenue from timber licenses.

The proceeds of timber dues were £22,270 in 1848; £24,198 in 1849; £24,728 in 1850, and £30,318 in 1851. In 1852, the first year in which the new regulations were in operation, the total receipts from timber licenses and duties went up to £53,013, of which £7,656 represented ground rents. This increase, moreover, accrued in spite of the reduction by one-half of the rate which had previously been levied on red pine. The trade in that article had for some years been declining in volume, and the timber decreasing in price, while the white pine, formerly considered as of secondary importance, had met with increasing appreciation in the British market. Under these circumstances the distinction made by the tariff of rates, which fixed the duty on red pine timber at one penny per foot, while white pine only paid one half-penny, was felt to be an injustice and an anomaly. Petitions from the corporation of Bytown and the municipal council of Carleton County, among others were forwarded to the Government, praying for a reduction of the Red Pine duty. Hon. John Rolph, the Commissioner of Crown Lands, in a report on the subject, dated July 24th, 1852, dealt fully with the changed conditions of the lumber export trade and the causes resulting in the supremacy of Canadian white pine as our staple forest pro-His presentation of the matter is of general interest, apart from the immediate object of the inquiry, in its relation to the new phase entered upon by the lumber industry in response to the altered demands of the British market. After noting the representations of the petitioners that from time to time, when the Imperial differential duty was reduced below 24s. per load, the export of Canadian red pine began to diminish and their apprehensions, that the continued decline in the trade threatened its utter extinction unless the heavy charges to which it was subject were reduced by equalizing the duty with that on white pine, the report continued: -"It appears that the rates levied upon the respective kinds of timber were adopted under circumstances very different from what now exist. period not very remote, white pine, the staple product of the forests of Canada, did not bear a very high character in the British markets. the other hand, red pine, which is the staple product of the forests of Northern Europe, was highly esteemed. The result was that the heavy duty on foreign timber enhanced the price of that article, of which the supply was obtained mainly from the Baltic, and while the greater quantity obtained from thence regulated the price, the limited supply obtained from Canada was favored by a difference at one time of more than 1s., and until lately of more than 6d. per foot, even the latter being much more than the difference in freight.

White Pine in Favor.

"Of late years, however, the White Pine of Canada has been found, for many purposes, a better article than red, and has acquired a higher character than it formerly bore, the result of which has been that while the export value of the Red Pine in Quebcc has been diminished by the withdrawal of the artificial price formerly created for it, the value of White Pine has become gradually enhanced by a better appreciation of its qualities.

"It is indeed to be hoped that Canada will, upon the whole, be a gainer by the changed aspect of the trade. It may seem strange that a higher value should be attached to a highly taxed article, merely, as it were, by reason of its extra price, but it is a remarkable fact that, as the price of a highly taxed and highly priced article was lowered by the removal of the unjust impost upon the consumer, the comparatively untaxed article, till then cheap, became better appreciated as it became subject to a more equitable and

fair competition. When the colonial timber trade was 'protected,' the species of timber which Canada and New Brunswick only could supply in abundance was cheap, and in proportion to its price was considered of little value, but when left to fair competition, it has risen in the estimation of the consumer to an extent equivalent to the loss sustained upon that species of timber which had really been enhanced in value by the differential duty."

The report refers to the statistics presented in the memorial of the County of Carleton as evidencing the serious and permanent character of the depression in the export of red pine, which are as follows:—

		Export.	Price	(40	feet average)	١.
			s.	d.		
				0	per foot.	
1845		5,182,320	1	0	- "	
1846		5,206,040	0	$11\frac{3}{4}$	"	
1847		4,466,520	0	9 -	"	
				81	66	1,
1849		4,070,600	0	8 -	"	
				8	64	
	***************************************	, ,		8	**	
		,				

White versus Red.

The report went on to point out that the then existing rates of duty levied upon red and white pine, apparently established in 1829, has been maintained through all the mutations of the trade since that period without modification. Though no statistics were available to show the relative value of red pine at that period, yet at a much more recent date the average market value was at least double the value of white pine and therefore justly subject to the higher duty. It still bore a higher value in Quebec market than white pine, but it also cost more to bring it to market, considering which it was doubtful whether red pine bore even as high a value as white when growing in its natural state. It was of much smaller average size and consequently required a greater amount of labor to produce in a marketable state an equal quantity of cubic feet. The red pine producing country lay at a greater average distance from the market, increasing the cost of transportation, and the average level of the red pine country was higher than where the white pine was principally produced, consequently there were greater obstacles and more expenses incurred for slides, dams and other improvements to enable it to be floated. The heavier charges to which the production of red pine was subject, were therefore regarded as fully equivalent to any difference in the market price in its favor and reducing its value as a standing timber to a par with the white pine.

The Commissioner estimated the loss to the revenue for the current season by the proposed reduction at £4,166 13s., but stated that the amount would be more than made up by the stricter enforcement of the law, and the prevention of frauds by which timber had escaped the payment of duties under the false pretence of being from private lands. The report concluded with the recommendation that in consideration of existing circumstances of the trade the prayer of the petitioners be granted and the duty on red pine be reduced to one half-penny per cubic foot. An Order in Council to this effect was accordingly issued on the 14th of September following.

Exports.

In connection with this subject the following figures from a return of the quantity of timber measured through the Supervisor of Culler's office at Quebec for the years 1845-52 are of interest as showing the relative importance of white and red pine at that period:—

Year.	White Pine.	Red Pine.
	${f Feet.}$	${f Feet.}$
1845	19,141,982	4,444,515
1846	24,662,815	5,183,307
1847	12,074,708	6,516,922
1848	7,132,127	4,223,952
1849	11,924,198	3,797,584
1850	14,388,593	2,121,316
1851	15,487,180	3,189,657
1852 to Sept. 30	26,364,464	1,857,333

During the session of 1854-55 Mr. Carter, introduced a bill to protect the forest and to prevent the setting of fire to the woods with the view of clearing lands. The measure was however dropped before reaching a second reading, probably in consequence of the appointment of a Committee of the House to investigate the whole subject of the management of public lands. On the 16th October, 1854, the House of Commons adopted the following resolution:—

"Resolved, that a select committee composed of Mr. Galt, the Hon. Mr. Morin, the Hon. John Sandfield Macdonald, the Hon. Mr. Hincks, the Hon. Mr. Rolph, Mr. Lemieux, Mr. Jean Baptiste Eric Dorion, Mr. Langton, Mr. Ferguson, Mr. Fortier, Mr. Egan, the Hon. Mr. Merritt, and Mr. Cauchon, be appointed to examine and report upon the present system of management of the Public Lands and the various dues arising therefrom, together with the present mode of selling, leasing and otherwise disposing of the same, to report thereon with all convenient speed, with power to send for persons, papers and records."

The evidence taken by this committee covers a great number of points in relation to the lumber trade and forest management. The tenor of many of the answers received to the questions submitted by the committee are full of suggestion regarding the problem as it presents itself to-day, and show that the various phases of the question were at that time becoming better understood and receiving more intelligent consideration than in the

earlier days of the trade.

Loss of Timber Dues Through Squatters.

One of the most conspicuous abuses of the system to which frequent reference has been made, was the cutting of timber by settlers and squatters, either under the colorable title of purchase or otherwise. As has been seen the profuse granting of land far in excess of the requirements of settlement, prior to the outbreak of 1837, and the consequent low price of land for some time afterwards, brought about a state of affairs under which it was frequently cheaper to buy timbered areas outright for lumbering purposes than to pay the Government dues.

In later years the conditions of sale remained so exceedingly liberal that advantage was frequently taken of them to obtain possession of the land by payment of a small instalment of the purchase money for the sole

purpose of exploiting the timber. Under the regulations for the sale of public lands which prevailed at the time of the enquiry, the price varied, according to location and character, from three to ten shillings per acre. In the case of the higher priced lands in Western Upper Canada the money could be paid by instalments covering a period of ten years, only one-tenth being demanded in cash. Although the regulations strictly prohibited the cutting of timber, except where necessary for building, fencing and clearing, they were in many cases set at defiance.

William Spragge, of the Crown Lands Department, in a letter to the committee, after recommending that all ordinary Public Lands in Upper Canada should be placed at a uniform rate of five shillings per acre, thus

refers to the timber difficulty:—

"Of the purchase money it is desirable that a sufficient proportion shall be paid down, to guard against the land being plundered of its timber and then abandoned, which there is reason to believe is the course often pursued under the present system of one-tenth payments. Accordingly I would substitute payments of two-fifths, relieving the settlers from any further payment until the expiration of three years, by which term it may be assumed that from the produce of his land he would then be in a condition to pay a further instalment of another one-fifth.

Settlement Difficulties.

"Before concluding this letter it becomes advisable to refer generally to the privilege of cutting and disposing of timber and other merchantable wood, previously to the land being paid for in full. For the reason that the present system of one-tenth instalment conveys by a payment to that extent a species of right to the land, or a claim, the weight of which others not concerned do not choose to dispute, and under cover of which it is understood parties in many cases despoil the land of its timber, notwithstanding the prohibition to the contrary, and having accomplished their object will, in those cases where the land is not of superior quality, probably make no further payments. It is suggested that a permit to cut timber and merchantable wood be given to purchasers, under the system proposed, upon their depositing with the local agent, upon obtaining such permit, the amount of duty in advance upon the quantity of timber to be specified therein; as authorized to be cut and removed, the amount so deposited to remain available towards the purchase in the event of the required quantity of land being duly cleared in the proportion and within the time prescribed and the conditions of the occupation fulfilled. But the amount to be forfeited if compliance with the terms of settlement be not rendered, and also any fraud or mis-statement as to the quantity actually cut to render void the permit and have the effect of cancelling the purchase, forfeiting such sums as may have been paid in on account of it, and rendering liable to seizure all timber and wood, particularly in the permit, or assumed to have been cut under its authority and which can be attached.

"For the prevention and punishment of fraud, it is often found advisable to fence in by strongest regulations the public rights, and probably there is no description of property which requires to be so carefully guarded

as the Public Lands and timber "

A. T. Galt.

Hon. Alexander T. Galt, who in his capacity as manager of the British American Land Company, addressed a letter to the committee, expressed himself in favor of the American system of selling the Public Lands at a

low price for cash only. He regarded the denial of the right of the bona fide settler to sell timber as a hardship. "The plan adopted in my own management," he wrote, "and which I think might be followed with advantage, is to require the party purchasing the timber to account for it at the usual rate of stumpage, and the amount is thereupon passed to the credit of the purchaser of the land."

The Reciprocity Treaty.

Further observations made in this communication deal with a question, which was assuming prominence in connection with lumbering operations in consequence of the existing and prospective development of the export trade to the United States on a large scale. The adoption of the Reciprocity Treaty in 1854 securing the free exchange of the natural products between Canada and the United States, including "timber and lumber of all kinds, round, hewed and sawed, manufactured in whole or in part," stimulated considerably the growing demand in the United States for Canadian lumber. In proportion as the market for sawn lumber developed, the cutting of square timber, for long the leading branch of the industry, declined in importance and became less essential to the prosperity of the lumbering interest. The disadvantages of the square timber trade as compared with that of sawn lumber, more especially its wastefulness and the greater danger of forest fires involved by the debris and litter left in the woods, began to attract attention. Hon. A. T. Galt's remarks on the question in the letter before mentioned are as follows:

Square Timber Wasteful.

"Timber trade of Canada until the development of the American market, was almost confined to the export of square timber and deals. Apart from the indirect advantages of thus employing a large number of ships giving cheap passage to emigrants, I have always regarded the export of square timber as a profligate waste of one of the greatest sources of Provincial wealth. I believe it is at this day entirely unnecessary to enter into any argument to prove that the value of our forests to the country is precisely in proportion to the amount of labor expended in preparing the timber for market, and that therefore the more crude and raw state in which it is exported the less value the trade is to the Province.

"It must be conceded that it is most desirable to adopt such a policy as will cause capital, skill and labor to be most generally embarked in the trade, and this can only be done by holding out in the disposal of the timber, greater inducements to manufacture it into sawn lumber than into square timber, which latter wastes the finest portion of the wood, and represents the smallest amount of fixed capital and labor in its preparation.

"The importance of this distinction it appears to me, has never been sufficiently realized in the conditions under which timber limits have been disposed of. And I would strongly urge the consideration of it on the Committee with the view of their recommending such rates as may have a tendency to induce the export of timber in a manufactured state. One of two things must at present arise, either an inadequate rate must continue to be charged for saw logs, or an absolute bonus must be given to encourage the manufacture of that class of timber which is least valuable to the Province.

Rates of Dues too Low.

"I regard the present rates charged by the Crown for timber, as generally much too low, and believing that an increase would fall, not on the trade, but on the consumer, I suggest an immediate and considerable advance, which, if it should have the effect of causing greater attention to be given to the manufacture of sawn lumber, would tend to the more rapid settlement and prosperity of the great Ottawa Valley. Undoubtedly the increase of our lumber trade with the United States will be in the direction of sawn lumber, and it fully justifies the Government in seeking to obtain a price commensurate with the increased value of the timber."

An Official View.

Mr. Spragge, Chief Clerk of the Crown Lands Department, in a statement prepared for the committee, as to the cost of managing the public domain, with suggestions for changes in the direction of efficiency and

economy, thus dealt with the question:

"There is yet a subject to which I will take leave to allude, entitled, I think, to special attention. Those who have taken a real interest in the timber and lumber trade of Canada will be in a position, provided they have given due attention to the subject, to weigh the relative advantages of shipping the products of our forests in the form of squared timber, or in the more valuable and prepared form of deals and other sawed stuff. In perambulating land where timber has been made, as the expression goes, it is impossible to be otherwise than struck with the enormous amount of valuable wood which the axeman separates from the stick of timber, which, by the process of squaring, he is fitting for exportation, and which remains where it was detached from the square piece, and in process of time uselessly rots upon the ground. A bend in the tree or any small defect some distance up the trunk consigns all above one or the other to the same useless destiny of rotting upon the ground, which befalls the blocks which the axeman cleaves off, in reducing the round trunk to a square, and all but the superior trees and those which will make a piece of timber of a given length and square, remain unused.

"In cutting the short saw logs intended to be worked into deals, and other stuff manufactured in a saw mill, it is evident that the proportion of each tree, which can be converted into an article of export, may be estimated at fully three-fourths more than could be rendered available for market by making the tree into hewn timber, and many trees rejected as unfit tor timber, would cut up into saw logs, were the land divested of its timber. trees for that purpose, instead of the other,—and I think it may be reasonably computed that an acre of white pine would bring back to the Province, when converted into deals and other sawed stuff, a return three-fold greater than if exported as hewn timber. With this of course the superior value of the cubic foot of sawn timber would have something to do. And again, it should be kept in view, the more extended employment conferred upon the laboring population in preparing for the foreign market the cargo of the ship freighted with sawn stuff, beyond that expended upon the freight of the timber-laden ship. Add to this the employment that mills afford to artizans, and the advantage to the farmer resulting from the greater home consumption of produce, induced by one system of export rather than the other; and sound reasons deducible from the various circumstances combined, will be found for fostering and encouraging the shipment of the produce of our forests, when prepared for exportation as deals or other sawn stuff in preference to their being sent from the Province in the shape of timber.

Drawback Proposal.

"There is one way, which occurs to me, in which this seemingly desirable encouragement could be afforded, that is, by allowing a drawback to the shipper equal to one-third of the duty leviable. When it is taken into account that the duty paid by the lumber merchant upon what he takes off from every acre (using up everything which he can prepare for export) is probably more than three-fold greater than would be paid by the timber merchant were he to make timber upon the same piece of land; from the circumstance that of necessity he rejects or wastes what the other had no difficulty in working up; the lumber merchant appears to have a species of right on his side to the mark of consideration for his branch of trade, which

the allowance of a drawback would indicate.

"It is unfortunately too much a matter of certainty that what used to be designated our inexhaustible supplies of timber are rapidly disappearing, and sound policy would suggest that inducements should be offered for economizing that which still stands in the forest; and in addition to those which I have already named for the following among other reasons: The British capital invested in our railways, and in Provincial and Municipal loans, must ere long lead to an annual drain in very considerable sums in the way of interest and profit, and the large amounts hitherto yearly brought into the country and expended for military purposes being about to cease will, both the one and the other, tend to render it more difficult than ever to balance our accounts satisfactorily with Europe. To export all our products in a shape and form such as to increase their intrinsic value cannot but be a matter of the greatest moment; and I believe that in recommending the allowance of a drawback on deals and other sawn stuff I am advocating a measure worthy of serious consideration."

The System in United States.

The differences between the Canadian and American systems of disposing of the timber were thoroughly discussed during the course of the investigation. The exposition of the methods pursued in the United States rendered it abundantly evident that whatever defects might exist in the Canadian system it was much superior to that of the United States in the matter of preventing the monopoly of natural resources by comparatively few individuals and securing to the public treasury returns in some measure proportionate to the value of the privileges granted.

Jonathan R. White of the State of Michigan, explained to the committee the system adopted in the United States for the sale of public lands

and timber as follows:

"The land districts, which are established by Act of Congress, having been surveyed, measures are taken for the sale of the lands by the appointment of a Registrar and a Receiver. The Registrar is supplied with all necessary information respecting the lands. He receives the applications and issues his certificates of application, but receives no money. The Receiver receives the money for lands, transmits it immediately to Washington with name of purchaser, in whose favor the patent at Washington is then transmitted to the Registrar of the land district for delivery. On the

appointment of the Registrar and Receiver the lands are declared by proclamation of the President as open for sale, and a public auction is advertised to take place at the Registrar's office in the land district at the uniform, fixed upset price for all the public lands in the United States of one dollar

No Limit to Quantity.

and twenty-five cents per acre. Such lands as are not sold at auction are therefore open for sale to any applicant at the upset price. Neither at the first auction sale nor afterwards is there any limitation as to quantity that may be bought. The lands are all sold for cash. By Act of Congress of last year a graduated scale of prices has been fixed, whereby lands remaining unsold for a certain number of years may be disposed of at lower rates than one dollar and twenty-five cents. A party desirous of purchasing makes application in writing to the Registrar, who, in the absence of other claimants, issues a certificate in his favor, with which he proceeds to the Receiver and pays the purchase money."

The following answers made by Mr. White to questions submitted by the Committee explain the working of the system as it affected the lumber

industry.

"Will you state the mode in which timber is disposed of?" "The Government do not permit the sale of timber on public lands, and agents are expressly appointed to prevent depredation. The purchase of the land is

the only mode in which timber can be obtained."

"Do you consider this a good plan?" "I do. It aids the sale of the lands, making them subject to taxation and encouraging the settlement of the country, also promotes the saving of the timber, which, under the stumpage system, will always be more or less wasted. The lands are generally fit for settlement after the timber is removed."

"Supposing the land to be of little value for agricultural purposes, would you still consider it expedient to sell the land and not the timber by stumpage?" "I would not. If the land be of little value except for the timber, it is the greater reason for selling it, especially as if sold the tim-

ber will be more economically applied."

Objection to American Plan.

The Canadian lumbermen and Crown Lands officials who gave evidence clearly pointed out the defects of the American system as set forth by Mr. White.

"I have read Mr. White's evidence," said David Roblin, an experienced lumberman," and am decidedly of the opinion that the plan he proposes would at once place in the hands of the rich and opulent capitalist all the good lands of the Crown, or would lead to the formation of private companies for the purpose of purchasing the whole of them; once in the hands of wealthy individuals or companies they would immediately ask a large advance upon the cost and sell them on time to those that actually cultivate and improve the lands, and who have no other resource but to submit and to pay such fines as were demanded or seek elsewhere for more favorable terms to obtain a living for themselves and families, * * With reference to Mr. White's remarks respecting the disposal of timber on the public lands; it is quite evident that he knows very little of the subject upon which he speaks or of the amount of duties paid on timber here. He says it is even better to sell lands that are not fit for agricultural purposes than to sell the timber. Now take the plan which he proposes, viz., selling the

land in the United States at 6s. 3d. per acre, and suppose these lands were timbered, it would take 150 feet of pine timber at ½d. per cubic foot (the Government duties) to pay for an acre of land, about two trees to the acre of a very ordinary size, being only 75 feet average. Now it will be observed that if the Government only get duties on two trees to the acre they get this price with the land left, which is certainly worth something even should it be given to an actual settler. But the fact is one acre of good timbered land will afford on the average at least about five times the quantity above mentioned. His remarks on this score may be quite applicable to prairie lands, where little or no timber is to be found, but can never apply to lands where there are to be found 150 feet on an acre, and the price according to his estimate. I may add that I have only taken pine timber in the above calculation, which pays a much less duty than other descriptions such as oak, elm, etc."

Andrew J. Russell, Crown Lands agent at Bytown, urged that past experience was strongly against the uncontrolled acquisition of land in "Were such a blight," he said, "to fall on the lands fit for settlement on the Ottawa it would check the consolidation of the Province as an inhabited country, and be injurious to its unity and strength. For there, as the chief value of the land is in its timber forests, we know it would be for that it would be purchased by speculators; the soil would be little thought The lumbering which is causelessly complained of now would then certainly be the governing interest and settlement be entirely at its mercy. Government would have lost all control of the land which it now retains and the immediate interest of the speculator would overrule the interest of the Province. * * The unconditional sale of lands could not possibly forward settlement more than the present system—would be advantageous to the speculators but fatally injurious to the revenue and might, by checking settlement, be injurious to the welfare of the Province."

Private Ownership.

How well-founded these objections to the American system were has been amply shown by the experience of later years. The alienation of extensive tracts of the public domain of the United States has not promoted economical methods of lumbering with an eye to maintaining the productiveness of the forests for the benefit of future generations. On the contrary it has resulted in large regions adapted by nature for tree-bearing, but otherwise unproductive, being stripped entirely of their vegetation with the object of realizing immediate profit and turned into barren wastes, while the fact that the ownership of the soil remains vested in private hands is a serious obstacle to such comprehensive plans of reforestation as in the light of the increased knowledge of the subject and the urgent necessities of the case might otherwise be undertaken. In those instances where it is sought to accomplish something in the direction of setting aside forest reserves, the State governments either find their schemes confined within narrow limits or rendered abortive by the conflict with vested rights which should never have been accorded, or find themselves compelled to repurchase at a heavy cost the lands necessary for their purpose.

Early Forestry Advocates.—Bogus Settlers.

The evidence of several of those who testified before the committee shows that practical men at that time realized the desirability of maintaining permanently in timber the non-agricultural regions and understood that the principal danger to the stability and permanency of the lumbering interest was the opening up for settlement, or the toleration of squatters upon the lands especially adapted for forest reserves. Criticizing an observation made by Mr. Sprague, Mr. A. J. Russell said "he is also mistaken in saying that the lumber trade is but a temporary branch of trade of which a few years more will probably see the end. In the region of which he speaks the quantity of arable land is comparatively small, much must forever remain a forest country, of which its timber will continue a staple all the more valuable for its becoming scarce elsewhere and will continue to give an * * It is not desirable to increased value to farm produce there. have forest tracts wholly unfit for settlement surveyed into subdivided townships. The expense is lost to the public and the subdivision offers facilities for the plundering of timber from the adjoining Crown Land under the pretence of settlement on the lots purchased by them (unless duties be levied as I propose on all timber from lands in future sold). It also offers some temptation for settlers to occupy inferior lands where they cannot afterwards presper, for the temporary profit of the timber, and where the fires they occasion in burning choppings at unsuitable seasons cartainly increase the destruction of the standing forests. As to the protection of the public domain from fire, I am afraid but little can be done. The sale of forests to private individuals would have but little effect that way, for the license holders have now already as great an interest in preserving the timber as if they were proprietors. The only practicable measures I can think of are, to enforce the law against burning brushwood during the season when danger is greatest from fire, making the offence a misdemeanor punishable by fine and imprisonment and giving a reward to informers. The injury to settlements as well as to the public forests on the Ottawa would justify

Forest Lands to be Surveyed.

additional rigor. And the discouragement of the practice of squatting in the timber forests, which would be best effected by surveying and throwing open for settlement at a low price such tracts of land only as are really fit for cultivation. Especially endeavoring to draw settlers of all kinds back into the hardwood country on the headwaters of the western tributaries of the Ottawa, by the opening of practicable roads and a survey of a sufficient quantity of land there for settlement. Giving no encouragement to settlement in the timber tracts, except where necessary for the maintenance of reads unavoidably leading through them to a better land."

William Hamilton, lumberman, in reply to a question as to the prevalence of forest fires and the best method of preventing them, said:

"The most certain way of preventing the destruction of timber by fire is that Government should put a stop to squatters entering into the land of the Crown (either surveyed or unsurveyed) without the consent of either the nearest local agent or that of the Government, as there is sufficient land of equal, if not better, quality unoccupied in the front townships. The only cause of destruction of timber has arisen from such settlers and I am satisfied that there is annually destroyed as much, if not more, timber by fire by such settlers than arrives in the Quebec market yearly."

The following extract from the evidence of James Henry Burke of Bytown, sets forth very clearly the mutually advantageous relations existing between the lumbering and the agricultural interests, and also emphasizes the view more positively and comprehensively brought out during the course of this investigation than in any previous treatment of the subject, that a radical and essential difference in the administrative system

in dealing with agricultural lands and non-agricultural lands respectively, was not merely warranted, but necessitated to insure justice to both these interests. The weakness of the American method, or any system that approximates to it, in including non-cultivatable forest-covered land in the same category as soil capable of profitable tillage, is that in treating the timber as a mere appendage to the land, instead of a feature giving a distinct and specific character to the region producing it, the interests of the public and posterity are almost certain to be sacrificed to the immediate profit of the purchaser.

Lumbering—An Aid to Settlement.

To the question, "What effect has the present system on the preservation of the forest, and on the settlement of the waste lands of the Crown?" Mr. Burke replied: "I think the present system has a tendency to conserve the pine timber, to spread a local market for the produce of the backwoods settler over the longest space of time, without which the settlement of several bundred square miles of your best territory can scarcely be made. We have an immense fertile territory stretching westward from Bytown to Lake Huron, and north-westward from Nipissing to Lake of the Woods, which, as a whole, is no way inferior to an equal area of some of the Eastern States of the Union. But our territory is a wilderness. In the centre of the country named lies the timber fields of the Ottawa, at present yielding their first crop, which goes to build up the cities of the east and west. Nature has so arranged it, that this pine-producing territory does not possess a fertile soil. Were it such, the axe of the settler would destroy the timber required to make the western prairies inhabitable, or to spread the comforts of civilized life over the forestless isles and continent of Europe. This pine territory has its allotted end, and will subserve; perchance beneath those farstretching forests repose rich mines of metal to tempt man's arm to delve the earth when the dark green canopy, which shuts out sunlight, has disappeared.

"But mark this coincidence; surrounding this pine territory and contiguous to the great lumber fields, is the large area to which we have alluded, possessing a fertile soil and timbered with hardwood. This timber has not the commercial value of pine, and its destruction is not a national This land is destined to sustain a large body of agriculturists in close proximity to the great timber making centres. It enables us to raise the grain, fodder and provisions, consumed in timber making, from eighty to ninety miles nearer the ground of consumption than we now do. While the lumber trade flourishes in pristine vigor population should be introduced, but let us not be understood to encourage the wanton, foolish and insane policy of the Crown Lands Department in surveying, a township where nothing but pine and rock exist, or where to get a thousand acres of habitable land, settlers may be thrown in to spread fire and havoc through the pine forests; we go for keeping a fair line of separation between the lumbering and agricultural regions, as nature has laid it down. The whole bulk of the produce consumed in lumbering above Bytown is moved a distance of one hundred and two miles, we can shorten this distance materially. The moving of these supplies costs nearly fifty thousand pounds per annum —it is so much thrown away. Were the lumber market cut off from the people who now command it, immediately after our railways now in hand are completed, the country would be no loser. When good communication with the eastern scaboard exists and the Reciprocity Treaty secures our equality with the Americans in their own markets, we can afford to leave the lumber market to an interior population. The sooner that market is supplied by the soil west of the seventy-seventh degree of longtitude, the better for the country. All grain grown east of that will find as profitable an outlet to the eastward. To arrive at such a state of things we want a population of eighty or one hundred thousand additional souls laboring the productive soil of the interior, and to have this we must encourage immigration."

To Prevent Fires.

"What means would you suggest for the preservation of the forest from fire?" "Survey no townships on which the soil fit for farming purposes does not bear a certain proportion to the pine-covered soil, which in most cases is unfit for settlement, permit no isolated scattered settlers to locate amidst the pine forests, and forbid by general law, or municipal regulations, the burning of brush, etc., between the 4th of June and 4th of September."

The report of the Select Committee was made on the 18th of May, 1855,

the two first paragraphs of which are as follows:

"That owing to the varied and extensive character of the subject referred to your committee, and the very important interests liable to be affected by such changes as might be recommended, it has not been possible to obtain sufficient evidence to warrant your committee in arriving at a definite conclusion and general report on the matters referred to them. They are, therefore, obliged to report the evidence obtained to your Honorable House, accompanied by the unanimous expression of their opinion, that important modifications of the present system are imperatively required, and they, therefore, recommend that the subject with the evidence herewith submitted, be again referred to a Select Committee of your Honorable House at the next meeting of Parliament.

"With reference to the disposal of timber on the public domain, your committee strongly recommend, that no change whatever be made in the terms upon which present limits are held, pending the final decision of your Honorable House in reference to this most important question, as it is their unanimous opinion that, until the system is determined upon and regulated by Act of Parliament, a change of the present regulations would

be detrimental to the public interests."

Ground Rent.

The ground rent system adopted under the Timber regulations of August 8th, 1851, was modified by an Order-in-Council of the 20th of August, 1855, providing "That the extreme amount of ground rent payable as a penalty, over and above the single rent in any case of non-occupation shall not exceed the minimum amount the berth would produce in duties (on square timber) if duly occupied according to regulations; but this limitation not to affect timber berths acquired since the ground rent system was in force by competition thereon, or other special regulation and not to imply but what the Government may raise the rents or increase the duties, as the future circumstances of the trade may render expedient."

The terms of this Order-in-Council clearly indicate the determination of the Government to guard against any assumption that the purchase of timber limits subject to a ground rent conveyed such a vested right, either moral or legal as would preclude the imposition of new conditions or

increased payments whenever it might be deemed advisable.

Regulations Subject to Change.

From the very outset the settled policy of the Crown in dealing with the holders of the timber licenses has been to maintain unimpaired the right of Government to vary at will the terms upon which the limits were held from year to year, the claim of the licensee extending no further than the working of his limit under whatever regulations might be imposed. The continuous enjoyment of any franchise or privilege has always the tendency to create a vested right, unless the interests of the public are jealously safeguarded against such an implication, and it is fortunate that the position taken by Canadian administrations on this question has been sufficiently clear and positive to prevent the conditional usufruct of the lumberman gradually lapsing into practical ownership.

Up to this time there had been no regular official reports for the information of Parliament and the country as to the operations of the Crown Lands Department, details as to the proceedings of this very important branch of the public service being principally obtained in the form of special returns. On the 5th of May, 1856, on motion of Hon. A. T. Galt, the House of Com-

mons adopted the following resolution:

Annual Reports.

"Resolved, that it is the opinion of this House, that the Commissioner of Crown Lands should submit to this House an annual report upon the Department of Public Lands, made up to the 31st of December of each year; to be presented on the 15th of February following if the House be then in session or at the meeting of Parliament succeeding."

From the first annual report of the Commissioner issued in accordance with this resolution, for the year 1857, it appears that an Order-in-Council adopted in that year effected a change in the system of collecting ground

rents, postponing the payment until the 30th of April.

The subject of the adequate protection of timber growing on private lands from spoilation or damage engaged the attention of Parliament during the session of 1860, resulting in the passage of "an Act for the further protection of growing timber," the main clauses of which are as follows:

Protection of Timber.

1. "If any person steals or cuts, breaks, roots up, or otherwise destroys or damages, with intent to steal or unlawfully carry away, or procures any person or persons to steal or to cut, break, root up, or otherwise destroy or damage with intent to steal or unlawfully carry away, any tree or sapling, standing, growing or being on the lands of any other, the injury done to such other person thereby being in amount more than ten dollars, every such offender being convicted thereof shall be guilty of a misdemeanor, and shall be punished at the discretion of the Court by fine, not exceeding the sum of one hundred dollars, or by imprisonment in any common gaol for a term not exceeding six months, or by both; and the said fine or any portion thereof, the Court may in its discretion award to the person injured.

2. "If any person receives or purchases any tree or sapling, trees or saplings, or any timber made therefrom, exceeding in value the sum of ten dollars, knowing the same to have been stolen, or unlawfully cut or carried away, such receiver or purchaser shall be guilty of a misdemeanor, and may be indicted and convicted thereof; whether the principal offender

has or has not been convicted, or be or be not amenable to justice and shall be liable to the same punishment as the principal offender."

The remaining sections provide that the Act shall not affect any civil proceeding against the offender, or prevent the adoption of other criminal proceedings.

A more stringent measure was adopted, applicable to Lower Canada only, by which it was provided that any person found in a forest reserved for firewood, sugar-making or other purposes, or on any road in its vicinity, with any tree or part of a tree in his possession, might be taken before a justice of the peace and, in case of failing to satisfy the latter that he came lawfully by the property, fined not more than eight dollars over and above its value.

Increasing Revenue.

The report of the Hon. P. M. Vankoughnet, Commissioner of Crown Lands for the year 1859, presented in 1860, contains some interesting details as to the development of the system and the expansion of the lumber industry. The amounts accruing due for ground rents, timber dues, and slide dues for four years were as follows:— 1856, \$262,872; 1857, \$289,839; 1858, \$232,624, and 1859, \$316,656, indicating a steady increase in the volume of the output. The Commissioner said concerning the adoption of the auction system:—

Auction Sale Results.

'Whenever there has been any demand for timber berths, and it was at all likely that any competition for them existed or would be excited, recourse has been had to the plan of disposing of them by public auction. This method has been attended with the best results in the St. Maurice territory where a sale was made last fall. Fourteen berths, containing an area of 572 square miles, were sold, realizing the sum of \$2,569 for bonus and ground rent, besides the sum of \$457.50 payable to the St. Maurice Road Fund. The bonus varied from \$5 to \$1,200. The berths were disposed of to practical lumberers, who are all working them this winter, thus restoring to the St. Maurice a trade which had departed almost entirely from it. This sale was made under regulations, different from those which had been previously in force in that section; a simple bonus, payable at the time of sale, in addition to the ordinary ground rent being called for as the measure of competition."

Land Sales to Speculators Cancelled.

The fraudulent cutting of timber by squatters and pretended settlers continued to be a source of trouble to the administration in spite of all

efforts to repress the practice. On this point the report said:

"While every means at the disposal of the Government is employed to facilitate settlement, strong measures have been adopted, as the occasion presented itself, to check the inroads of individual speculators upon particular localities, under pretence of settlement, when in reality their only object has been to despoil the land of the timber. The Department has not hesitated to cancel sales thus obtained when the facts have been established. The holders of timber limits are often subjected to attacks of this description by parties who enter upon their limits, select the best timbered

lcts, and effect purchases of them, subject to conditions of settlement which they have no intention of fulfilling. This, though illegal, can no more be prevented, when parties are determined to infringe the law, than can stealing."

Setter's Timber to Apply on Purchase.

The same abuse received a good deal of attention at the hands of the Department during the year 1860, when energetic measures were taken by the Commissioner to abate the evil. Previous regulations for the sale of public land had somewhat contributed to foster the abuse, for while the settler was permitted to cut down and burn any timber in the course of clearing the land, if he sold any of it he became liable to be treated as a trespasser. The evident absurdity of such a regulation, coupled with the difficulty in enforcing it, naturally led to its being set at defiance and encouraged a spirit of lawlessness and antagonism to the authorities, which led to other inroads upon the forests. New regulations were issued under which the settler was allowed to cut and sell the timber growing on the lot purchased by him, provided the value of the timber was applied in payment of the purchase money due the Crown, and that conditions of settlement, including the building of a dwelling 16 by 20 feet, the clearance of five out of every hundred acres and actual residence for six months had been fully fulfilled. He was also required to take out a license and pay a fee of \$4. In his report for 1860 Hon. Mr. Vankoughnet thus refers to the extent to which plundering of the public domain was still carried on:-

Trespassers.

"As a further step towards legitimizing the lumber trade, I have found it necessary to put in force the existing laws of the country against trespassers in the public forests. Hitherto these forests have been treated in some sections of the Province as if they were public commons where everybody might enter and cut and slash as he pleased. When seasons of partial prosperity in the lumber trade arrived, a great rush into the manufacture of lumber, and particularly of hewed lumber, generally followed, nearly always resulting in over-production and in over-production too of a badly manufactured article. Instances have come to my knowledge this season of individuals of one section of the trade endeavoring to encourage this over-production by entering into contracts for the delivery next summer of from 75,000 to 100,000 feet of timber, notwithstanding that the party who undertook to furnish it had no timber berth of his own, and relied only on trespassing in the public forest, or in fraudulently obtaining timbered lots out of a lumberer's license to enable him to fulfill his contract. allow this trespassing to continue would be injurious to the general interests of the trade and of the country; it would also be unfair towards the licensed lumberman who conforms to the law, and under its protection embarks his capital in making the many improvements necessary to enable him to get his lumber to market with advantage."

After referring to the antagonism arising between settlers and lumbermen, the latter complaining of the inroads of settlers upon the best timbered lots within their limits, while the settlers advanced as a grievance that lumbered-over lots came into their hands depreciated in value, the report pointed out the obvious remedy against this continued clashing of interests:

Proper Surveys.

"When any case of fraud on the part of a pretending settler has been established the Department has cancelled the sale and seized the timber cut on the land. In order, however, by more general action to do away as far as possible with the complaints alluded to, and to afford legitimate protection to both the interests mentioned, I have been endeavoring to effect discriminating and descriptive surveys with a view of ascertaining what lands are suitable for settlement, and what are not suitable, and what sections of the country may be reserved and advantageously laid off in timber berths."

Another abuse which Mr. Vankoughnet undertook to reform was the delay in the payment of timber dues, which resulted in a considerable accumulation of indebtedness, and in some instances in fraud, on the Department. To put a stop to the practice the 30th November of each year was fixed as the day for the payment of all timber dues. All amounts then unpaid were charged with six per cent. interest, and it was provided that if not paid before the following 1st of July the license held by the defaulter was to be forfeited. No lumber of any kind was to be exported before the dues thereon were paid. To prevent the practice of shipping lumber cut by trespassers on the public domain to the United States, which was extensively pursued, the co-operation of the Finance Department was obtained. Previous to obtaining clearances all vessels having lumber on board intended for the United States were obliged to furnish the Collector of Customs at the port of shipment with a certificate from the Local Crown Timber Agent that the claim of the Crown on the lumber had been settled.

Another Commission.

During the session of 1863 the lumber trade was again the subject of a Parliamentary enquiry. On the 15th of April the House of Commons adopted the following resolution: "Resolved, that a Select Committee composed of Mr. Dawson, Mr. Dunsford, Mr. McLachlin, Mr. Desaulniers, Mr. Haultain, Mr. Robitaille, Mr. McCann, Mr. Hooper and Mr. Scott be appointed to enquire into the state of the lumber trade in Canada, in relation to the settlement of the country, and the action of the Government in dealing with these interests respectively; to report thereon with all convenient speed, with power to send for persons, papers and records."

The time at the disposal of the committee was too short to enable them to go thoroughly into the subject, but they examined a number of witnesses and submitted some valuable evidence with a view to a continuance of the

enquiry next session.

One point clearly brought out was the unsatisfactory working of the regulation permitting settlers to cut timber for sale on their lots, which operated as an inducement to settle upon land which was mainly valuable for its timber and not adapted for farming. The following conclusions were embodied in the report of the committee:—

"First in importance appears the fact that the existing law, under which the lumber trade of the Province in general is governed, has for several years back been continuously and systematically violated in the Crown Lands Department and an uncertain and ever varying action substituted for the fixed and definite provisions of law under the Statute.

"A former committee of this House, of which the Hon. A. T. Galt was chairman, in 1855, having had the subject under consideration reported as follows:—"With reference to the disposal of timber on the public domain,

your committee strongly recommend that no change whatever be made in the terms upon which limits are held, pending the final decision of your Honorable House, in reference to this most important question, as it is their unanimous opinion that until the system be determined upon and regulated by Act of Parliament a change of the present regulation would be detrimental to the public interests.'

"Your Committee entirely concur in the above and would further recommend that whenever even any minor change in the regulations may be thought advisable, it should be published for at least three months before any Order-in-Council be passed to give effect to it, so that the trade may have an opportunity of being consulted in regard to the change contem-

plated.

"With regard to the supposed difficulties between the lumber merchants and the settlers it appears by the evidence that no diversity of interest exists, but that the trade complains, not of the actual settler, but of those who make a pretence of settlement to break up their limits and secure the timber

to which the outlay of their capital has given value.

"The actual bona fide settler in like manner, finds the operations of the lumber merchant to his advantage, by reason of the roads constructed and the market for his produce thereby afforded. Your Committee are of the opinion that where such a complete community of interest exists, there need be no difficulty in arranging a system to the mutual satisfaction of both parties. And here again your Committee find that the want of any definite rule is the cause of misunderstanding. The Crown Land Department should divest itself of the power of dealing specially with cases as they arise, and provide and enforce a general system alike intelligible to them all.

"It appears from the evidence that settlement has been unreasonably pushed in some localities quite unfit to become the permanent residence of an agricultural population. Especially has this been the case on some of the Free Grant roads and adjacent country, lying between the waters of the Ottawa and Lake Ontario. Your Committee would refer to the evidence and recommend that the Government should, in all cases, ascertain positively the character of the country before throwing open any tract of land for settlement, so that such lands that are really not fit for profitable cultivation, may not be thrown upon the market. There being considerable diversity of opinion among the witnesses in regard to some of the localities adverted to, it seems to the committee that the Government should have an examination made by some thoroughly competent and reliable officer, whose report would be available in any further consideration of this subject.

Tenure of Limits.

"Your Committee would further suggest to your Honourable House, that it would be advisable, for the protection of the public forests of the Province, the commercial value of which is of such vast interest to the country, that a character of greater stability be given to the tenure of timber limits, providing of course against its being made any barrier to the actual settler on lands adapted for cultivation."

During the session of 1864 an attempt was made to complete the work of investigation begun by Mr. Dawson's committee in accordance with the suggestion embodied in the report. On the 17th of March in that year the House adopted a resolution appointing a Select Committee composed of eighteen members, with Hon. Mr. Cauchon as chairman, "to enquire into the causes of the rapid destruction of our forests, and the means to be

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adopted to prevent it, to consider the expediency of reserving as forests the extensive tracts of land which abound in exportable timber, but are unsuitable for cultivation; of enacting a Forest Law, and to suggest that system which in its opinion is best adapted to the requirements and conditions of the country." No report was ever made by this committee, the approach of the era of political storm and stress which immediately preceded Confederation, and the pressure of more immediate and exigent issues doubtless absorbing all the attention of the legislators.

In 1865 a change in the fiscal year came into operation, in accordance with which the Crown Lands and other departmental reports presented in 1866 covered the period from the 1st July, 1864, to 30th June, 1865, instead of coinciding with the calendar year. Hon. Alexander Campbell, Commissioner of Crown Lands, in his report for that year showed himself to be thoroughly alive to the necessity of an advanced forestry policy on the line of a strict discrimination between cultivatable and non-agricultural lands, and the setting apart of the latter as permanent timber reserves. The following paragraph sets forth his views on the subject:

Reserves Advocated.

"The value of a very large area of our remaining public lands, as a pine country, is well understood and has not been exaggerated. exports of the products of the Canadian forests for the seven years terminating 31st December, 1863, deducting timber imported, were valued at \$73,004,312; the value of the products of agriculture consumed in the country I have no means of ascertaining, but the exports of such products during the same period, with a similar deduction, were valued at \$49,951,961. Though much of it has been denuded of its valuable timber, it is the opinion of the best informed that a large area remains untouched; happily for the interests of the country, the pine exists on lands for the most part unfit for settlement. It needs a careful discrimination between pine lands exclusively and lands fit for settlement, to place it in the power of the Government to conserve this valuable source of national wealth. Should the whole of our uncultivatable lands be set apart, as I think should be done, as a pine region, and no sales made there, the land would, if the trees were cut under a system of rotation such as is now adopted in Norway and Sweden and in many of the German states, recuperate their growth of merchantable pine in cycles of 30 and 40 years, and pine growing might be continued and preserved for ages to come. In view of the future requirements of this continent and of Europe, and of the singular advantages Canada enjoys as a pine-producing country, I humbly submit that it is of the utmost importance that we should now take steps in this direction."

One result of the continued discussion of the subject and the inconveniences arising from growing scarcity of wood in the older settled portions of Lower Canada, was the passage of the following Act, applicable to that Province alone, which received the Royal assent on the 17th day of September 1805.

tember, 1865.

The Act of 1865.

An Act to provide for the preservation of standing timber.

"Whereas in most of the old counties of Canada the inhabitants experience serious difficulty in obtaining wood for fuel and building purposes, and whereas it is advisable to profit by past experience, and to adopt measures while there is yet time, to prevent the inhabitants of new town-

ships from being subjected to similar inconveniences; Therefore Her Majesty, by and with the advice and consent of the Legislative Council and Assembly of Canada, enacts as follows:

Township Reserves.

1. Whenever it shall be expedient to erect into a township any certain extent of the waste lands of the Crown in this Province, it shall be the duty of the Commissioner of Crown Lands to set apart, in such township, a reserve of wood land, which shall form not more than one-tenth or less than onetwentieth of the superficial area of such township, and the limits thereof shall be fixed and defined at the time of the erection of such township, and the Commissioner shall, whenever he deems it expedient, make a reserve for a like purpose in all townships already erected and in which the Crown owns a sufficiency of wood land.

2. Such reserves may be in a single lot, or divided into several lots,

according to circumstances.

3. And to provide for the difficulties which might arise respecting the rights and duties as between neighbors (droits de voisinage, decouverts, fences, ditches and all others) which the inhabitants residing on lots contiguous to such reserve might claim, the patents of the lots so situated shall contain a condition binding the proprietors, tenants and occupants of such lots, to renounce for ever any claim to all rights and duties as between neighbors (droits de voisinage), and a reduction may be made in the selling price of such lots in consideration of the disadvantages which might result from the preceding provision, if the Commissioner of Crown Lands deems it advisable.

4. The Governor in Council may transfer the control and management of every such reserve to such municipal or other authorities willing to undertake the same, as he shall think proper to select, and under such conditions

as he shall impose.

5. Nothing in this Act contained shall have the effect of restricting in any way whatsoever, the rights, powers and privileges conferred by Chapter twenty-five of the Consolidated Statutes of Canada.

Lower Canada Only.

6. This Act shall apply only to Lower Canada."

This Act was allowed to remain a dead letter, and no timber reserves were ever set aside under its provisions. Here it may perhaps be advisable to depart from the chronological sequence of events relating to timber regulations and management in Canada, and follow up the course of legislation in regard to timber reserves in Quebec under Confederation. Act passed by the Quebec Legislature in 1875 provided that:

Quebec Regulation.

"It shall and may be lawful for the Lieutenant-Governor in Council upon the recommendation of the Commissioner of Crown Lands, to set aside certain portions of the forest lands of the Crown, vacant at the time, to remain forest.

"The territories so set apart shall be reserved for the production and culture of timber, and shall be worked and managed and the timber thereon be cut, as shall be ordered from time to time by regulations made by the Lieutenant-Governor in Council.

"The timber cut from and upon such reserves shall be sold at public auction."

No action was ever taken under this Act as at first adopted, but in 1883 it was amended by the addition of several sections. The new legislation gave the Lieutenant-Governor in Council authority to set apart as a Forest Reserve "all the ungranted lands of the Crown now held under licenses to cut timber, except such parts of such licensed lands on which no merchantable pine or spruce timber grows, and which are fit for settlement, and also such other portions of the ungranted lands of the Crown as the Lieutenant-Governor in Council, on the recommendation of the Commissioner of Crown Lands, may think fit to set apart." No land so set apart was to be sold or appropriated for settlement purposes until after the expiration of at least ten years, and not then until it was established to the satisfaction of the Lieutenant-Governor in Council that the whole or any part of such territory could be thrown open with advantage. It was provided that in the renewals of licenses after a forest reserve had been created all land previously under license in the locality and not included in the reserve should be excluded.

Under the provisions of this measure a very large area in the western portion of the Province of Quebec running north to the Height of Land was by Order in Council dated September 10th, 1883, set apart as a forest reserve, with the exception of all lots situated in a number of townships included "which hereafter may be found (from inspection made by competent and authorized persons) fit for settlement and destitute of merchantable timber."

This action of the Government excited a great deal of opposition, especially on the part of promoters of Colonization Societies, and the objections raised to the operation of the system were so strong that in 1888 the legislation authorizing the setting apart of timber reserves was repealed and the following substituted:

"In future a timber reserve of twenty per cent. of each lot sold shall be made at the time of the granting of the location ticket or permit of occupation for public lands.

"The Commissioner of Crown Lands may determine, through his agent, the locality where the reserve shall be situated.

"The Lieutenant-Governor in Council may make all regulations not incompatible with this Act for the right to cut timber upon the reserve indicated; but the proprietor or the occupant of the lot upon which it exists shall, together with his assigns, remain the perpetual usufructary of such land, with all the rights he may have as such."

This measure proved no more effective or satisfactory than previous attempts to solve the problem, as it altogether lost sight of the principle of distinguishing between agricultural and non-cultivable lands, and applying radically different methods of management. Its repeal in 1889 closes the chapter of Quebec's forest reserve legislation.

Regulations of 1866.

New Regulations for granting licenses to cut timber were issued on 13th of June, 1866, by which some important alterations were made as will be seen by a comparison of the following with the text of those issued in 1851.

Crown Timber Regulations, 1866.

1. Licenses for such vacant berths as the Commissioner of Crown Lands may see fit, together with all vacant forfeited timber licenses, shall be offered for sale at public auctions to be held half yearly in each Timber Agency, on the 10th of July and the 10th of January, (or on such other dates as the Commissioner of Crown Lands may fix by public notice) at an upset price of Four Dollars a square mile or such other rate as he may fix by such notice, and shall be awarded to the highest bidder making immediate payment at the time of sale; and if not then sold shall be granted to the first applicant thereafter making immediate payment of the upset price and ground rent. But in case of two or more applications for any such berth being received at the same time, it shall be immediately again offered for sale by public auction. Unissued Licenses already awarded, however, and such as may be awarded by the Commissioner of Crown Lands on existing grantable applications, under Regulations of 8th August, 1851, shall be granted on the terms upon which they have been or may be awarded. the intervals between sales, licenses for new Timber Berths for which applications may be made to the Commissioner of Crown Lands, or Crown Timber Agent for the territory in which they lie, may be granted to the first applicants paying in with their applications the upset price and ground rent above mentioned. Not more than one berth to each applicant—the bonus to be returned should the berth be relinquished as valueless within six months without cutting timber on it.

2. Applications must be in writing and the spaces asked in them must be distinctly described in connection with known points established by survey or boundaries already defined, or if in surveyed townships the lots and

ranges must be stated.

3. No timber Berth shall be licensed in unsurveyed lands exceeding ten miles in length by five miles in breadth or fifty superficial miles in area and half that size in surveyed townships, the area to be estimated by the Crown timber agent or other authorized officer.

4. All timber licenses are to expire on the 30th April following the

date thereof.

5. Newly granted Licenses, and renewals of licenses that have been duly occupied, shall be subject to a yearly Ground Rent of fifty cents each superficial mile of area included within their limits, estimated as before mentioned; but in computing the ground rent no license shall be charged at

less than eight miles of area.

- 6. The Ground Rent to be exacted on the renewal of any license shall be double that of the preceding year if the berth licensed has not been duly occupied, increasing annually in that proportion while the berth continues unoccupied (excepting the year succeeding that in which the license has been first granted, if not in a surveyed township); but the so increasing ground rent shall not exceed the rate of twenty-three shillings and four pence a mile, (being equal to the lowest amount of duties on square timber the ground would yield if duly occupied, added to the rate of fifty cents first mentioned) reverting to the original rate on the berth being duly occupied. The making of an average of five hundred feet of square timber or 20 saw logs to the mile, to be considered as due occupation. No claim for reimbursement of ground rent over calculated to be entertained after the issue of license.
- 7. No timber berth shall be forfeited for the non-occupation of it, provided the increased ground rent on that account be duly paid; but any berth on which the increased ground rent is evaded by false statements as

to occupation, shall (after the holder of it has had an opportunity of being heard in opposition) be granted to the first applicant pleading such evasion before the first day of November and proving the same by the affidavit of a commissioned Surveyor before the first day of December following the date of the false statement made. If half occupation only be proved, the holder of the license may retain one-half the berth after it has been equitably divided by the Crown Timber Agent.

- 8. License holders who shall have duly complied with all existing Regulations shall be entitled to renewals of their licenses, provided they shall have made and delivered to the Crown Timber Agent of the locality, before the thirtieth day of September, or such prior date in any locality as the Commissioner may fix, sworn statements of the number and description of pieces of timber and saw logs cut by themselves or by others to their knowledge upon each of the berths held by them during the previous seascn: and shall have paid to the Crown, on or before the fifth day of December following, the ground rent payable for renewal of their licenses for the ensuing season; but should they fail to comply with these conditions in respect to any berths held by them, such berths shall thereby become vacant and the right to license therefor forfeited and they shall be sold at public auction or be otherwise disposed of as before mentioned, excepting that if double the ground rent otherwise chargeable be paid for omitting to furnish the statement above mentioned, and payment be made before the day of sale with ten per cent. in addition for each month of the delay in payment, the berth may be re-licensed to the former holder.
- 9. License holders desirous of obtaining renewal of license must make application for such renewal to the Crown Timber Agent of the locality before the 1st of July in each year, stating what berths have been duly occupied, failing which such berths shall be charged with the rate of ground rent payable on non-occupation.
- 10. Crown Timber Agents shall keep registers of all licenses granted or renewed by them and transfers thereof, which, together with their plans of licensed berths and vacant ground, shall be open for public inspection.
- 11. Transfers of timber berths to be in writing, and if not found objectionable by the Crown Lands Department, or agent for the granting of licenses, to be valid from the date on which they may be deposited in the hands of the latter; but no transfer to be accepted while the party transferring is in default for non-payment of dues on timber to the Crown.
- 12. Timber berths are to be described in new licenses as "not to interfere with prior licenses existing or to be renewed in virtue of Regulatons" on the date of their first being issued. Where licenses clash, the one of more recent origin is to give way to that of prior date, computing back to the season it was last acquired at auction, or by grant from the Crown. And should any license, by error or defect in its description, be found evidently incompatible with the intention or regulations under which it was granted, the Commissioner of Crown Lands may cause it to be cancelled or amended.
- 13. The Inspector of Crown Timber Agencies at Ottawa, and any officer thereunto authorized elsewhere, shall, at the written request of any person interested, issue instructions stating how the boundaries of timber berths should be run to be in conformity with existing licenses. The surveys are to be performed at the expense of the parties requiring them, who must cause copies of the plans and field notes of the surveys to be delivered to the officer giving the instructions, subject to his examination and approval, to be paid for by him and kept on record by the Crown Timber Agent of the locality.

• 14. In cases of contestation as to the right to berths or the position of bounds, the decision of the Crown Timber Agent of the locality or the Inspector of Crown Timber Agencies, or other officer authorized by the Commissioner of Crown Lands, shall on notification thereof being given to the parties or their representatives on their premises, or sent to their address, be binding upon the parties unless reversed by arbitration commenced within three months of such notification.

15. To prevent delay or disputes as to arbitrators it shall only be necessary for the party thinking himself aggrieved by such decision to notify in writing to the officer who has given it, his dissent and the arbitrator he has appointed. It shall then be the duty of the officer who has given the decision to take the place of arbitrator on the other part, and in case of their not agreeing as to an umpire, should one be required, the Commissioner of Crown Lands shall appoint one, on request of either of the parties or either of the arbitrators—such arbitrators may receive evidence obtained subsequent to the decision and each of them and the umpire are to be paid five dollars for each day they are engaged on such arbitration, by the parties jointly.

16. Timber cut under license shall be paid for at the following rates,

viz.:

	s.	d.
Oak and Walnut, per cubic foot	0	$1\frac{1}{2}$
Elm, Ash and Tamarac	0	1
Red and White Pine, Birch, Basswood, Cedar, Spruce, etc.	0	01
Pine Saw Logs, each, 13½ feet long	0	6^{7}
or, ten cents per standard log of 13½ feet, 20 inches in least diameter		
Unmeasured culls to be charged at average of the lot they are in.		
Spruce Saw Logs, each 13½ feet long	0	$2\frac{1}{2}$
Staves, Pipe, per mile	32	6
Staves, W. Indian		0
Cordwood (hard) per cord		8
Soft Wood, per cord		

Railway Timber, Knees, etc., 10 per cent. ad valorem.

To be charged upon the quantities shewn by measurement under the direction of the Supervisor of Cullers, or Deputy Supervisor, at Quebec, or Montreal, or other place of sale or shipment, or by other reliable measurement, where that cannot be obtained, otherwise each stick of White Pine may be estimated as containing 70 cubic feet.

Red Pine as containing 38 cubic feet. Other kinds of wood 34 cubic feet.

And when any license holder is in default for, or has evaded the payment of dues to the Crown on any part of his timber, they may be levied on any other timber of his, cut under license, together with the dues thereon.

17. All square timber, logs, deals, boards, or other stuff leaving the Agency in which it has been cut in any form, must be submitted to counting or actual measurement, and statements under oath must be furnished as to the quantities of timber and logs cut under license whenever required. Owners or lessees of Saw-Mills cutting under license must show by such sworn statements the total number of each kind and length of logs cut or acquired by them, and taken to their mills, or where left, each season, giving the number in standards also, and must prove by satisfactory affidavits on what lots, and how many on each lot, such as are from private lands, have been cut; clearances to be refused in case of non-compliance.

- 18. Before moving any raft or parcel of timber, lumber or saw logs from the agency in which it has been cut, the owner or person in charge thereof shall make report thereof to the Crown Timber Agent, making, if required, declaration upon oath as to the number of pieces of each kind of wood contained therein, and the number of cribs; and to exempt timber from private land, if any, from dues as Crown timber, -must furnish satisfactory affidavit stating what lots it was cut upon and how much on each lot,—whereupon he shall obtain a clearance from the Crown Timber Agent, stating the number of pieces in the raft or parcel, how many, if any, have been satisfactorily proved to be from private lands, and on how many, if any, the dues have been previously or then paid. On the arrival of any such raft or parcel at Quebec, or any intermediate place, or other port, for sale or shipment, the owner or holder of it shall make report thereof to the Collector of Crown Timber Dues, or Deputy Supervisor of Cullers, or other appointed officer, within forty-eight hours, and in addition to the quantity shewn by the clearance as subject to dues, any surplus timber beyond the number of pieces stated therein, on being ascertained by the Collector of Crown Timber Dues, Deputy Supervisor of Cullers or other authorized officer, if not satisfactorily accounted for, shall be held as having been cut upon Crown Lands and be subject to the payment of dues accordingly.
- 19. Parties omitting to report the departure of their rafts or other timber from the Agency in which they held license, or the arrival thereof at Quebec or Montreal or other port or place, for sale or shipment, within the Province as before mentioned, may be refused further license—and be subject to forfeiture of the timber for evasion of Regulations as provided in section 3rd of Cap. 23, of the Consolidated Statutes of Canada.
- 20. Occupants, grantees or purchasers of Public Lands who have not completed all conditions of sale, or grant, cutting timber without license (except for clearing, building or fencing thereon) or others doing so by their permission, shall be subjected to the penalties established by law for cutting timber without authority.
- 21. Persons evading or refusing the payment of timber or slide dues, or the final settlement of bonds or promissory notes, given for the same, or in default with the Crown Timber Office or Agent, also persons taking violent possession of disputed ground before obtaining decision in their favor, and persons refusing to comply with the decision of arbitrators or with Regulations estate. Led by Orders in Council, or who forcibly interrupt Surveyors, shall? refused further licenses, and their berths become disposable to others on the expiration of their licenses.
- 22. Licenses are to be granted on the annexed form in duplicate, the clause at the foot thereof must in the duplicates be signed by two securities and the description of each berth is to be written on the back thereof. The duplicates to be kept of record by the Crown Timber Agent.
- 23. Dues of all kinds on timber cut under license remaining unpaid on 30th November following the season in which it was cut, to be subject to interest from that date, but without prejudice to the power of the Crown to enforce payment of such outstanding dues.

The most noteworthy changes were the provision for regularly held and systematic auction sales for vacant timber berths, and the fixing of an upset price in all cases, upon the berths to be offered. The new regulations, moreover, were a good deal more stringent in the provisions designed for the prevention of fraud in evading the payment of timber dues.

Export Duties After Reciprocity.

The Reciprocity Treaty with the United States, under which, as will be hereafter shown, the exportation of forest products, more especially sawn lumber, had greatly increased, expired on the 17th March, 1866. By the new tariff, which came into force on the 27th of June, export duties were imposed on saw logs and shingle bolts shipped from Canada, excepting to any of the British North American Provinces, at the rate of \$1.00 on every thousand feet, board measure, for pine, and 50 cents for every thousand feet, board measure, for spruce. The first tariff adopted under Confederation during the session of 1868, imposed additional export duties on timber from the 1st of October in that year, as follows:—

Shingle bolts, per cord of 128 cubic feet	\$1	00
Stave bolts, per cord of 128 cubic feet	1	00
Oak logs, per M	2	00
Spruce logs, per M		
Pine logs, per M	1	00

Confederation.

By the Confederation of the British North American Provinces, consummated by the establishment of the Dominion of Canada on July 1st, 1867, the management of public lands and timber was relegated to the several Provincial administrations. The British North America Act, 1867, in defining the respective powers of the Dominion and Provincial Governments includes, among the subjects coming exclusively within the scope of the Provincial legislators, "The management and sale of the public lands belonging to the Province, and of the timber and wood thereon." As will have been noted, from the frequent references to legislative action and quotations of official utterances during the few years which preceded the union of the Provinces, a very considerable advance had been made in public opinion on the subject of forestry. The question was being intelligently studied in all its bearings by those charged with the responsibilities of legislation. Men were beginning to understand the true remedy for evils which had been developed, not so much by any positive neglect or misconduct on the part of those in charge of affairs, but rather as the result of crude, unscientific methods under which the distinction between the two classes of public land requiring essentially different systems of management was largely ignored. Public, or at least legislative and influential sentiment, appeared to be seriously aroused to the danger to the practical interests of the country to be entailed by the rapid disappearance of the forests covering the non-agricultural region and forming its only possible source of productiveness, and to be fast crystallizing in the direction of a system of scientific forest management, as distinct from methods of mere sale and exploitation.

Provincial Jurisdiction.—Agricultural and Forest Lands.

But with the advent of the larger and more agitating questions involving the rise and fall of parties, and culminating in the union of the previously isolated provinces, opening broader vistas for Canadian aspirations and enterprises, and introducing a host of additional responsibilities and fresh problems, it is not surprising that the matter of forest preservation was thrust into the background, and for many years thereafter received but

little attention. But it is certainly a curious illustration of the ebb and flow of public opinion, and the manner in which movements for the abatement of public evils or the promotion of needed reforms frequently subside after having attained a considerable headway, only to spring into activity again many years afterwards, when their former influence has been well nigh forgotten.

Revenues in 1866.

Some details showing the extent and principal characteristics of the timber industry at the time of Confederation may appropriately be presented. The report of the Crown Lands Department of Canada for 1866 gives the amount collected during that year for timber dues and ground rents as \$338,302, and for slide dues \$63.483. The total exports of forest products for the year ending June 30, 1867, are valued by the Trade and Navigation returns at \$13,948,648, as compared with total exports of agricultural products of a value of \$16,765,981.

Exports to United States.

Nearly all the exported forest products found a market either in Great Britain or the United States, the proportion consigned to each of these countries being nearly equal, as Britain received shipments to the value of \$6,889,783, while those sent across the border were valued at \$6,831,252. These figures indicate a very considerable change in the conditions of the trade during the course of the decade immediately preceding Confederation, at the beginning of which the British demand was double that of the The total exports of forest products to Great Britain for the three years 1854-5-6 amounted in value to \$18,288,702, while the aggregate shipments to the United States for the same period were valued at \$8,894,218. It will be seen therefore that at the time of Confederation the American demand for Canadian timber and lumber had more than doubled, while that of Britain remained comparatively stationary. The principal increase in the volume of the growing American trade was in sawn lumber. "plank and boards" to the value of \$1,866,712 were exported from Canada to the United States in the year ending Jan. 5th, 1854, the same item figures in returns for 1867 to the extent of \$5,043,367. This development of the sawn lumber trade with the United States, while to a certain extent fostered under the favorable conditions of the Reciprocity Treaty, was no doubt in the main due to the rapid growth of population in the Eastern States, coincident with a gradual diminution in their home sources of supply, rendering it necessary for them to look to Canada for their requirements.

Export of Hemlock Bark.

In 1868 the Dominion House of Commons set on foot an enquiry into the best means of protecting hemlock timber from the destruction caused by the demand for hemlock bark for tanning purposes. A select committee was appointed on April 1st, composed of Mr. Pope, Hon. Mr. Dunkin, Hon. Mr. Wood, Hon. Mr. Huntington, Mr. Brown, Mr. Masson of Soulanges, Mr. Joly, Hon. Mr. Beaubien, Mr. Senecal and Mr. Burpee "to enquire into and report upon the best means of protecting hemlock timber from destruction caused by those manufacturing the extract of hemlock bark and the exportation thereof from Canada." The report of the Committee, based on answers to questions submitted to a number of those having special inter-

est in the question or facilities for information in different parts of the country, presents some considerations which have a wider significance than their bearing upon the specific subject of the investigation, and are of general applicability to the problem of utilizing forest products with the minimum of waste and to the greatest advantage.

Extract of Bark.

The Committee concluded that the bark consumed in local tanneries was applied to a legitimate use, benefitting both the settler and the country at large; the settler was enabled to defray the cost of clearing the land by the sale of the bark and at the same time had opportunity to dispose of the timber to advantage, as the work of clearing gradually proceeded. The export of bark and the manufacture of "Extract of Bark" they regarded in a very different light. The quantity of bark exported annually from Canada to the United States was estimated at not less than 100,000 cords, which, at ten cords to an acre, represented 10,000 acres annually stripped for the supply of American tanneries. This process resulted in the wholesale destruction of timber, the trees being generally left to rot on the ground, largely increasing the danger of forest fires. The rate of consumption was, however, liable to be indefinitely increased by the establishment of works for the manufacture of "extract," capable of being transferred from place to place so long as a supply of the raw material was obtainable anywhere, which was likely to have a much more serious effect upon the hemlock forests, as the extract thus made could be sent to any part of the world, whereas the exportation of the bark was, by the cost of transport, limited to a comparatively small radius. It was argued on behalf of the manufacture that it furnished employment, distributed large sums in wages, and gave an impetus to other industries, etc., but while admitting the force of this contention the Committee regarded these benefits as more than counterbalanced by the wasteful and destructive nature of the industry. "One of these factories," says the report, "upon a basis of calculation afforded by those concerned in them, will consume all the bark available within a radius of about ten miles, at the present rate of consumption, within a period of from ten to twelve years, when it must be moved to a new field of operations. The injurious effect of its removal from the neighborhood will be such as to far more than counter balance any temporary advantage that may have been derived from a spasmodic and short-lived activity and enterprise; and the bark that would have sufficed to supply for an indefinite period, a tannery giving employment to the population, will have disappeared altogether. The loss to the country at large will also be serious. At present we have an ample supply of material for our tanneries, enabling us to compete successfully with other countries in the manufacture of leather; but if for the sake of encouraging the manufacture of the extract we suffer our-

A Transient Industry.

selves to be deprived of this advantage we sacrifice a permanent and most important manufacturing interest for one that, at the best, is but transient, and of slight comparative importance.

To Prevent Export.

The report concludes as follows:—"After a most careful consideration of the question, your committee can only come to the conclusion that unless some steps are speedily taken to check the wasteful and extravagant rate

of consumption now going on, that is really for the benefit of foreign countries at the expense of Canada, many years will not have elapsed before our own tanneries will be seriously crippled, if not closed altogether, for lack of that which we are now so freely giving away to others, we shall be no longer able to compete successfully with other countries in the manufacture of leather; and a large portion of our forest land will not only be denuded of that which constitutes its chief value, but will be rendered practically unfit for settlement. Under these circumstances, your committee feel it their duty to press upon the Government the necessity of adopting such measures as may be calculated to check the evil complained of."

The particular method favored by the Committee for dealing with the matter had been previously indicated in a brief preliminary report pre-

sented to the House on the 4th of May, which reads as follows:-

"Your Committee have made a careful enquiry as to the extent of the Hemlock forests in different parts of the country and the rate at which the consumption of bark is proceeding in connection with the tanneries, etc. They find that a very large proportion of the bark annually taken from the forest is exported to the United States, threatening in a very short time to diminish materially the supply for home consumption.

Export Duty Recommended.

"Your Committee, therefore, feel it their duty to urge upon the Government the expediency of imposing an export duty of one dollar per cord upon Hemlock Bark, with a view of checking the wholesale destruction of

our Hemlock forests now going on."

No action was taken by the Government in the matter. The proposal met with the active opposition of the interests affected and a number of petitions against the imposition of an export duty from those engaged in the industry, and the farmers in the respective neighborhoods where it was carried on were presented, and as no counter agitation re-inforced the Committee's recommendation the subject was dropped.

Bearing on Present Problems.

The conditions disclosed by this investigation and the considerations influencing the conclusion reached by the Committee have been presented somewhat more fully than is warranted by the intrinsic importance of the enquiry, on account of their bearing upon similar questions of an international character, affecting the management of our natural resources, which are likely to arise with increasing frequency in the future. The case of the exportation of hemlock bark and extract presents a striking analogy to the question of the shipment of saw logs in an unmanufactured state—and the forcible presentation in the report above quoted of the injury sometimes involved to the permanent and substantial interests of the country by the toleration of a lucrative though temporary and wasteful exploitation of raw material to be manufactured abroad, is full of significance in its application to the existing situation.

UNDER CONFEDERATION.

The report of Hon. Stephen Richards, the first Commissioner of Crown Lands for Ontario, for the year 1868, contains the following paragraph relating to the Woods and Forests Branch.

First Provincial Timber Sale.

"The timber dues, ground rent and bonus accrued during the year amount to \$190,237. The total timber revenue collected on account of such accruals, and of the arrears of previous years, is \$234,209. Of this amount the sum of \$14,446 was received as bonus on the south half of the Township of Sherbourne, sold in two timber berths by public auction at Peterboro on the 23rd of December, 1868, Berth No. 1, covering an area of 20½ square miles (and which had previously suffered from fire and trespass) was sold at a bonus of \$249 per square mile. For Berth No. 2, covering an area of 18 square miles, a bonus was obtained of \$519 per square mile, being by far the largest bonus ever received by the Crown on a sale of timber limits in this Province."

The question of saw logs exportation, which has since assumed such prominence, cropped up during the first session of the Provincial Legislature, when on February 26th, 1868, on motion of Mr. Christie, a Select Committee was appointed to enquire into the nature of and extent of the exportation of saw logs, shingle bolts and stave bolts cut in this Province and exported from the Dominion as follows:—Hon. Mr. Richards, Messrs. McDougall, Paxton, Hooper, Cockburn and Christie. No report appears

to have been made by the committee.

Increasing Revenues.

On January 9th of the same year, Mr. Rykert moved for returns showing details as to the number of timber licenses granted since 1860, and among the particulars asked for was, "so far as practicable what portions of said lands are fit for agricultural purposes?" The returns were brought down in due course, but no attempt was made to furnish any information as to how much of the area under license was of a cultivable character. Meanwhile the timber revenue of the Province was increasing by leaps and bounds. The report of the Commissioner of Crown Lands for 1869 stated that a more careful supervision over lumbering operations was inaugurated than was believed to have previously existed. Reference was made to the issue of new Crown Timber Regulations in April, 1869, by which the dues were raised fifty per cent. in excess of the former rates, and a uniform rate of ground rent fixed. The regulations also provided for the more satisfactory accounting for the timber and saw logs cut upon public The accruals from timber dues, ground rents and bonuses during the year amounted to \$508,561, and the collections were \$435,397. This very substantial increase in the revenue was emphasized by a comparison between the results of Crown Lands management under the ante-Confederation Canadian administration, and under the new Ontario regime respectively, as shown by the following table:—

1. Timber revenue derived from the whole Province of Canada:--

2. Timber revenue derived from Upper Canada alone: --

The timber revenue for the year ending December 31st, 1867, was	152.266
The timber revenue for the year ending December	,
31st, 1868, was	234,209 435,397

"In round numbers," concludes the Commissioner in a tone of justifiable exultation, "the timber revenue from the Upper Canada woods and forests is during the present year \$238,000, or say 120 per cent. in excess of the highest amount it ever reached in any one year previous to the 1st of January, 1867; and is \$48,000, or say 121½ per cent. in excess of the highest amount ever received from the whole of the Province of Canada in any year previous to the last mentioned date."

The new Crown Timber Regulations above referred to are as follows:

Regulations of 1869.

1. The Commissioner of Crown Lands may, at his discretion, cause the limit lines of any timber berth under license, which have not been already surveyed, to be properly surveyed and run, the costs of such survey to be paid by the holder of the license, and where two or more licensees are interested in the survey, the Commissioner shall determine what portion of the costs of survey shall be paid by each, and such costs of survey shall be a charge upon the Timber Berth, to be paid with the ground rent before renewal of the License.

2. The Commissioner of Crown Lands, before granting any licenses for new Timber Berths in the unsurveyed territory, shall, as far as practicable, cause the section of country where it is intended to allot such Berths, to be run into Townships, and each Township when so surveyed shall constitute a Timber Berth, but the Commissioner of Crown Lands may cause such Townships to be subdivided into as many Timber Berths

as he may think proper.

- 3. The Berths or limits when so surveyed and set off, and all new berths or limits in surveyed territory, shall be explored and valued and then offered for sale by public auction at the upset price fixed by such valuation, at such time and place, and on such conditions, and by such officer, as the Commissioner of Crown Lands shall direct by public notice for that purpose, and shall be sold to the highest bidder for cash at the time of sale.
- 4. All forfeited Timber Berths may be offered for sale on the second Tuesday in August in each year, by public auction, at such upset price and at such place as the Commissioner of Crown Lands may fix and appoint by public notice, or at such other rate as he may fix by such notice, and shall be awarded to the highest bidder, making payment at the time of sale, but should the said Timber Berth not be then sold, the same may be granted to any applicant willing to pay the said upset price and ground rent, or on such other terms as the Commissioner of Crown Lands may direct.
- 5. License holders who shall have complied with all existing regulations, shall be entitled to have their licenses renewed on application to the Commissioner of Crown Lands, or to such local agent as he may appoint for that purpose.
- 6. The Commissioner of Crown Lands shall keep a Register of all licenses granted or renewed and of all transfers of such licenses; and a copy of such registers, with a plan of the licensed limits, shall be kept by the Crown Timber Agent of the locality, and open to public inspection.

- 7. All transfers of Timber Berths shall be made in writing, but shall be subject to the approval of the Commissioner of Crown Lands, to whom they shall be transmitted for approval or rejection, and they shall be valid only from the time of such approval, to be expressed in writing.
- 8. Timber Berths are to be described in new licenses as "not to interfere with prior licenses existing or to be renewed in virtue of regulations." When the description of any berth or boundary, as given by any license, clashes with the description of any other licensed berth or territory, the license of more recent origin (tracing back only to the time when such license or any previous license, of which it is a renewal, was first granted) shall give way, and the Commissioner may amend or cancel such license wholly or in part, and substitute another in place thereof, so as to correct the description of the berth or limit intended to be licensed; and in all cases where any license has issued in error or mistake, or is found to be inconsistent with any other license, or inconsistent or incompatible with the regulations under which it was granted, the Commissioner of Crown Lands may cause it to be cancelled or amended, or he may refer all matters in dispute, with reference to the boundaries and position of Timber Limits, to arbitration, each of the contending parties to choose one Arbitrator, and the Commissioner of Crown Lands shall appoint an Umpire, naming a day on or before which the award of such Arbitrators or of such Umpire shall be made and delivered to the parties, and such award shall be binding on them.
- 9. Timber cut on limits for which license has been suspended or held in abeyance, shall be considered as having been cut without authority, and treated accordingly.
- 10. Occupants, locatees or purchasers of Public Lands, who have not completed all the conditions of sale or location, shall not, unless under Settlers' license or for clearing, building or fencing purposes on the said land, be permitted to cut timber or logs thereon, or to dispose of it to others. Persons found doing so shall be subject to the penalties established by law for cutting timber on the public lands without authority.
- 11. All Timber Licenses are to expire on the 30th April next, after the date thereof, and all renewals are to be applied for and issued before the 1st July following the expiration of the last preceding license, in default whereof the right to renewal shall cease and the Berth or Berths shall be treated as forfeited.
- 12. No renewal of any license shall be granted unless or until the Ground Rent, and all costs of survey, and all dues to the Crown on timber, saw logs, or other lumber cut under and by virtue of any license, other than the last preceding shall have been first paid.

13. All Timber Berths or limits shall be subject to an annual Ground Rent of \$2 per square mile, payable in advance before the issuing of any

original license or renewal.

14. All timber, saw logs, wood or other lumber cut under any License now in force or under any License which may be hereafter granted, shall be subject to the payment of the following Crown dues, that is to say:—

Black Walnut and Oak, per cubic foot	\$0	03
Elm, Ash, Tamarac and Maple, per cubic foot	0	02
Red and White Pine, Birch, Basswood, Cedar, Button-		
wood and Cottonwood, and all Boom Timber, per		
cubic foot		011
All other woods		01

Red and White Pine, Basswood, Buttonwood and Cottonwood saw logs, per standard of 200 feet board measure	0 1	5 .	
Walnut, Oak and Maple saw logs, per standard of 200 feet board measure	0 2	5	
Hemlock, Spruce and other woods, per standard of 200	0 20	9	
feet board measure	0 10	0 .	
All unmeasured cull saw logs to be taken at the average of			
the lot, and to be charged for at same rate,			
Stave, Pipe, per mille	7 0	0	
Staves, West India, per mille	2 28	5	
Cordwood (hard) per cord	0 20) *.	
Cordwood (soft) per cord	0 12	$2\frac{1}{2}$	
Hemlock Tan Bark, per cord	0 30)	
Railway Timber, Knees, etc., to be charged 15 per cent. ad valorem.			

15. The duties on timber shall be charged upon the quantities shown by the specification of measurement at the office of the Supervisor of Cullers at Quebec, or that of the Deputy Supervisor of Cullers at Sorel or Montreal, or by other reliable measurement, but where such actual measurement cannot be obtained, each stick of white pine timber shall be estimated as containing 70 cubic feet, Red Pine as containing 38 cubic feet, Oak 50 feet, and Elm 45 feet, and all other wood as containing 34 cubic feet.

16. All Licensees or occupants of Timber Berths shall furnish through themselves, their agents, cullers and foremen, to such agent or agents as the Commissioner of Crown Lands may appoint for that purpose, and at such time and place as such agent or agents may require, satisfactory proof upon oath as to the exact locality where all the Timber, Saw Logs, and other Lumber in his or their possession were cut, giving the number of pieces, and description of Timber, Saw Logs, and other Lumber cut by themselves and others to their knowledge upon each of the Timber Berths held or occupied by him or them respectively, designating what quantity, if any, had been cut on settlers' lands, giving the names of such settlers, the name of the Township, and the number of each lot and concession, exhibiting at the same time for the inspection of such agent or agents, the Books of count and measurement of such Timber, Saw Logs, and other Lumber under his or their control respectively; and shall, moreover, furnish such Agent or Agents all required information and facilities to enable him or them to arrive at a satisfactory determination as to the quantity and description of timber, saw logs, and other lumber made by them or him, or held in his or their possession respectively, on which the Government dues are chargeable; and in the event of such Agent or Agents deeming it expedient to cause such timber, saw logs, and other lumber to be counted or measured, the said Licensee or occupier of such timber berth and his or their Agents, cullers and foremen shall aid and assist in such count or measurement, but should such Licensee or occupier, or his or their Agents, fail to comply with these conditions, such Licensee shall forfeit all right to renewal of his License, and the berth or limit shall become vacant. And to enable persons who sell their timber under settlers' License to obtain their refund of dues, and timber cut on Patented Lands to pass duty free, it will be necessary for the parties interested to prove, on oath, taken before such Agent or Agents, and to his or their satisfaction. the number of pieces and description of timber and saw logs cut on each lot respectively. in the event of such proof being deemed unsatisfactory, the said Agent or Agents, may determine the same by causing a strict count of the stumps to he made and then certifying according to such count.

17. The Commissioner of Crown Lands or any authorized Agent, shall at all times have free access to and be permitted to examine the books and memoranda kept by any Licensee shewing the quantity of lumber in board measure sawn by him from logs cut on his timber berth or berths, and failing to produce such books and memoranda when required to do so, will subject such Licensee to a forfeiture of his right to a renewal of his License.

18. When any License-holder is in default for, or has evaded the payment of dues to the Crown on any part of his timber or saw logs, such dues may be levied on any other timber or saw logs belonging to such defaulter

cut under license, together with the dues thereon.

19. Before moving any raft, or parcel of timber, lumber or saw logs from the Agency in which it has been cut, the owner or person in charge thereof, shall report the same to the Crown Timber Agent making, if required, declaration upon oath, as to where the said Timber was cut, the number of pieces and description of each kind of wood contained in such raft or parcel of timber, and the number of cribs, stating at the same time. the number and description of pieces cut on private lands, also on lands under Settlers' License, giving the names of the owners or Licensees of such land, with the name of the Township, and number of each lot, and concession, and should such Crown Timber Agent not be satisfied with the correctness of such report, he shall cause a strict count to be made of the timber in such raft; and on being satisfied of the correctness of such report or count, the said Crown Timber Agent may grant a clearance, in due form, for such raft, stating the number of pieces and description of timber contained therein, distinguishing the timber cut on private lands and under Settlers' License, from that cut on the Crown Domain.

20. The owner or holder of any such raft or parcel of timber shall, within twenty-four hours after the same shall have arrived at its destination at Quebec, Sorel, Montreal or other port of sale or shipment, report the arrival of such raft to the Collector of Crown Timber Dues, or if at Sorel or Montreal to the Deputy Supervisor of Cullers, and should the said raft be found by the specification of measurement to contain a greater number of pieces of timber than is noted in the clearance, the surplus number of pieces, if not satisfactorily explained, shall be held as having been cut on Crown Lands without authority, and subject to the payment of dues accordingly.

21. Parties omitting to obtain their clearance at such agency, or omitting to report the arrival of such raft at its destination as above mentioned, may be refused further license, and may be subject to forfeiture of the timber for evasion of regulations, as provided in Cap. 23 of the Con-

solidated Statutes of Canada.

- 22. Persons evading or refusing the payment of timber dues, or the final settlement of bonds or promissory notes for the payment of such dues, or in default with the Crown Timber office or agent; also persons taking fcreible possession of disputed ground before obtaining decision in their favor, and persons refusing to comply with the decision of arbitrators or of the umpire, as provided by the 8th section of these Regulations, or with the Regulations established by Order in Council, or who forcibly interrupt surveyors in the discharge of their duty, shall be refused further licenses, and their berths shall be forfeited at the expiration of the then existing license.
- 23. Dues of all kinds on timber cut under license remaining unpaid on the 30th November following the season in which it was cut, shall be subject to interest from that date, but without prejudice to the power of

the Crown to enforce payment of such outstanding dues at any time the Commissioner of Crown Lands may think proper.

These regulations were amended by Order in Council dated the 18th of May, 1899, by the substitution for Sec. 10, as given above, of the following

provision:

10th. Occupants, locatees or purchasers of public lands shall not unless under settlers' licenses or for clearing, fencing or building purposes on the said land, be permitted to cut any description of timber or logs thereon, or to dispose of it to others until they have gone into the actual bona fide occupation of the said land, have built a habitable house thereon 16x20 feet at least, have resided thereon actually continuously for at least six months, and cleared and put under cultivation two acres at least of the said land. Persons contravening this regulation shall be subject to the penalties established by law for cutting timber on the Public Lands without authority. This regulation shall not be construed as in any way affecting the regulations respecting pine and cedar trees of the 27th day of May, 1869, and the 3rd April, 1880.

Timber Marks.

A measure of some importance to the lumber trade was passed by the Dominion Parliament during the session 1870. "An Act Respecting the Marking of Timber" proyided that every person engaged in the business of lumbering or getting out timber and floating and rafting the same on the inland waters within the Province of Ontario or Quebec, should be subject to a penalty of fifty dollars for failure or neglect to select a mark or marks to be put in a conspicuous place on each log or piece of timber floated or rafted. A timber mark register was to be kept in the office of the Minister of Agriculture, where all marks were to be registered, giving the party registering the same the exclusive right to use such mark. Provision was made against the duplication of marks, or the adoption by one lumberman of any mark bearing such a close resemblance to another previously registered as to cause confusion, and a penalty of not less than \$20 or more than \$100 was imposed for the use of any registered mark by any other person than the proprietor.

Stream Pollution.

The practice of throwing sawdust and other mill refuse into navigable streams and rivers was at this time very general among the owners of saw mills, with the frequent result of obstructing navigation by the accumulation of debris, as well as of destroying the fish in water where they formerly abounded. On February 20th, 1871, Mr. Cartwright introduced a bill for the better protection of navigable streams and rivers, into the House of Commons, by which this practice was prohibited. It was referred to the Committee on Banking and Commerce, who reported the bill back to the House on the ground that they were entirely without evidence as to the necessity of such legislation and recommended the subject to the consideration of the Government with a view to enquiry by Commission or otherwise. A Commission was accordingly appointed consisting of Hon. Hamilton H. Killaly of Toronto, John Mather of Chelsea, and R. W. Shephard of Montreal. Their report strongly favoured the proposed legislation, the need of which was plainly indicated by the testimony adduced, showing the serious impediments to navigation which in many instances had resulted from throwing saw mill refuse into the water. The measure when introduced in 1873 became law. Its principal clause provides that—

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"From and after the passing of this Act no owner nor tenant of any saw mill nor any workman therein, nor other person or persons, whosoever, shall throw or cause to be thrown, or suffer or permit to be thrown, any sawdust, edgings, slabs, bark or rubbish of any description whatsover, into any navigable stream or river, either above or below the point at which such stream or river ceases to be navigable." A fine of not less than twenty dollars was imposed for the first offence, the penalty for subsequent infractions of the law being not less than fifty dollars. It was made the duty of the fishery officers to examine and report on the condition of navigable streams and rivers from time to time and to prosecute offenders. The Governor-in-Council was given power to exempt any stream or river or any part thereof from the operation of the Act, on its being shown to his satisfaction that the public interest would not be injuriously affected thereby.

Export Duty on Saw Logs.

The question of the maintenance of an export duty on saw logs came up in the Dominion Parliament again during the Session of 1874. On the 9th of April a Select Committee composed of Messrs. Charlton, Currier, McDougall (Renfrew), McCallum, Scriver, Colby, and Stuart were appointed to enquire into and report on the working of the Act Cap. 44 of 31 Vic., so far as it relates to imposing an Export duty upon saw logs, shingle bolts, and stave bolts. The report of the Committee, presented on the 30th of April, was as follows:—

"That the Export Duty on saw logs, shingle bolts and stave bolts, imposed under Schedule F. of the Tariff Act of 1868, Cap. 44 of 31 Vic., is a tax upon settlers and owners of timber, who are prevented by its operation from obtaining the full advantage afforded by the best markets.

"That the Export Duty while reducing the market value of logs and bolts for the benefit of mill owners does not promote the manufacture of lumber, shingles, and staves at the principal Lake Erie Ports, and at many other points in Canada.

"That a large proportion of the export of pine and oak logs is long timber, entering into the same class of consumption as does the square oak

export of Canada.

"That exporters of round pine and oak from Lake Erie ports compete in American markets with Michigan timber dealers, to whom the Canadian

export duty afford a considerable protection.

"That since the imposition of the Export Duty, a large amount of capital embarked in the round timber trade has been withdrawn from Canada and invested in Michigan.

Hard on Settlers.

"That the saw mill interest of Canada has in the opinion of your Committee, been slightly benefited by the Export Duty; and that whatever benefit the Export Duty has conferred upon the saw mill interest, has been given at the direct expense of the settlers and owners of timber.

"That the Export Duty reduced to an ad valorem rate, would be on the average 40 per cent. on stave bolts; 30 per cent. on oak logs; 20 per cent. on pine logs; 25 per cent. on spruce logs, and 25 per cent. on shingle bolts.

"That the Export Duty is an extreme protective measure and partially at least inoperative as such, and that the burdens imposed by it are unequally distributed, falling as they do entirely upon settlers and other owners of timber."

An Act abolishing the Export Duty on stave bolts and oak logs was passed in 1875.

Export Duty Increased.

In 1886 the remaining export duties were altered, that on shingle bolts being fixed at \$1.50 per cord, spruce logs \$1 per thousand feet, and pine logs \$2 per thousand feet. The Governor-in-Council was authorized to increase the export duty on pine logs to \$3 per thousand feet. By an Act passed in 1888 the Governor-General was empowered either to reduce or remove these duties whenever it should appear desirable in the public interest to do so. By an Order-in-Council of the 13th November in the same year the export duty on saw logs was increased from \$2 to \$3 per thousand feet; but on July 5th, 1889, the former rate was restored, in view of a probable understanding being reached with the United States for more favorable duties upon our manufactured lumber. The negotiations progressed satisfactorily, and in 1890 Sir John Macdonald promised the removal of the export duty on pine and spruce logs in the event of the United States Congress reducing the import duty on sawn lumber to \$1 per thousand

Abolished in 1890.

eet. This reduction took place, and on October 11th, 1890, the Canadian

Government by Order-in-Council abolished the export duty.

With the accession to power in the United States of the Democratic Party the duty of \$1 per M. on sawn lumber was removed, and free trade in lumber and logs followed between Canada and the States. General business was good on both sides of the line, and in 1892 the timber trade was very prosperous.

Trade Depression.

The prosperous condition of the market which obtained in 1892 did not long continue. The prolonged period of financial stringency and business depression which set in during the following year in the United States, followed by the imposition of a duty of \$2 per thousand upon sawn lumber. largely destroyed the market for the coarser grades of lumber. Meanwhile large quantities of saw logs were being cut for exportation into the United States in order to furnish American mill owners with the raw material to enable them to meet the demand formerly supplied by Canadian shipments of the manufactured article.

Defensive measures were demanded by the lumber trade, and the Dominion Government was urged to reimpose the export duty of \$2.00 per M. on saw logs, abolished in 1890. As the United States tariff legislation imposing the import duty of \$2.00 per M. on sawn lumber also provided that this duty should be increased by the amount of export duty on logs that might be imposed by any other country, the Dominion Government was naturally reluctant to act. Western Ontario lumbermen who were mainly affected by the competition of their own logs sawn in Michigan, applied for relief to the Provincial Government, and in the session of 1898, at the instance of the Government, regulations requiring that all logs cut on Crown Lands should be manufactured in the Province, were approved by the Legislature. Michigan holders of Ontario timber limits, whose mills had been supplied with logs from them, claimed that this legislation constituted a breach of contract on the part of the Crown, that by the payment

of the bonus at the time they acquired the limits they were entitled to cut the pine timber thereon and dispose of it as they saw fit, and that this action by lessening the value of the timber to them was to that extent confiscation.

The authors of the legislation held that when the holders acquired these limits they obtained a license to cut for one year only; that they understood when acquiring them that if they obtained a renewal of their license the following year it must be subject to such regulations as the Government saw fit in the interest of the Province to impose; that the new regulations applied to Canadian holders of limits as well, and was desirable in the interests of the Province.

The American limit holders also claimed that this regulation was ultra vires of the Provincial Legislature, being an interference with the "Trade and Commerce" which lay within the jurisdiction of the Dominion Government. The legislation was, however, allowed by the Dominion Parliament, and in 1899, by consent of the Attorney General of the Province, the case of the validity of the regulation was brought before the courts. Justice Steele, before whom the case was heard, gave judgment in favor of the Province, and at this writing no appeal has been taken from this decision.

TIMBER SALES.

In 1871 the area of timber land under license in Ontario was considerably increased, and the revenue largely augmented by the sale of extensive

Extensive Sales.

timber limits in the districts of Muskoka and Parry Sound. These areas had been thrown open for settlement by the "Free Grants and Homestead Act of 1868," but by a report dated September 26th, 1871, the Commissioner of Crown Lands recommended that the lands remaining unsold and unlocated should be offered for sale as timber limits in berths not to exceed twenty square miles in area, under the following conditions. at its estimated area to be adjudged to the party bidding the highest amount of bonus. The bonus and first season's ground rent at the rate of \$2 per square mile to be paid immediately after the limit is adjudged. License to issue to the successful competitor within one month from the day of sale. All red and white pine timber or saw logs cut upon the said limits to be subject to the following special rate of timber dues. White and red pine timber, per cubic foot, 2½c.; white and red pine saw logs, per standard of 200 feet board measure, 30c. So much of the Crown Timber Regulations as conflicted with this order to be suspended for the purposes of this sale, but in all other respects to apply to the licenses to be issued. The Commissioner also recommended that the Department recognize the right of all purchasers or locatees of Free Grant Lands to sell or dispose of pine trees on their lots subject to the payment of the above duties.

Diameter Limit for Cutting.

These recommendations were approved of on the 4th of October, 1871. By a subsequent Order-in-Council on 22nd of November an important additional condition was imposed in connection with these sales, the purchasers being prohibited from cutting any trees of less size than thirteen inches in diameter at the butt, all pine timber under that size being reserved. At the same time the duty of 30 cents per standard saw log on lands located to settlers, being considered too high was reduced to 15 cents.

The timber berths in the Muskoka and Parry Sound districts disposed of under these conditions on November 23rd, 1871, comprising an area of 487 miles, realized \$117,672 in bonuses.

Sale of 1872.—Local Saw Mills.

The year 1872 is notable for a still more extensive sale of timber limits on the north shore of Lake Huron held on the 15th and 16th of October, when 5,301 square miles were disposed of, realizing as bonus \$592,601, and ground rent \$10,064, making a total of \$602,665. More than three-fifths of this area had previously been under license, but with the exception of 300 square miles, the licenses granted in this locality in former years had been allowed to lapse. Some little difficulty arose in connection with these sales by reason of the claims of saw mill owners who had been operating in a small way on the North Shore for some twenty years previous, manufacturing lumber mainly for local use. At first these mills were largely supplied with timber taken from Crown Lands without license or the payment of dues unless in exceptional cases. Afterwards applications were made for licenses by the owners, and in some instances small spaces of territory were assigned to the applicants, who, however, made considerably more extensive demands than appeared reasonable to the department. The settlers in some districts complained that the supply of lumber for local consumption was insufficient. To meet the case the following Order-in-Council was adopted on the 19th of April, 1872.

The Committee of Council have had under consideration the Report of the Commissioner of Crown Lands, dated April 9th, 1872, wherein the Commissioner states that, with the view of promoting settlement on lands at present remote from the centres of traffic and to contribute to the comfort and well-being of those already settled in such localities, a supply of sawn lumber for the erection of dwellings, barns, etc., is an absolute necessity, and the means at the disposal of the Department of furnishing a supply of timber for saw mills to meet such necessity being limited, he considers it expedient, in order to supplement such means, that recourse for a supply of timber should be had to lands held under license. The Committee advise that the Commissioner be authorized to withdraw, at any time, from any timber license hereafter issued or renewed, any lot or lots or portion of land, he may deem necessary for the purpose of enabling him to furnish lumber for the supply of saw mills, erected or to be erected, for the

manufacture of sawn lumber for local consumption."

In order to obviate any misunderstanding and prevent any possible abuse of this privilege by the export of lumber taken from lands set apart for the supply of lumber for the settlers, and further as a reasonable guarantee to license holders that their interests would not be necessarily interfered with, the following clause was adopted on December 17th, 1872,

as an addendum to the previous Order-in-Council:

"The timber from lands set apart for the supply of saw mills manufacturing lumber for local consumption, is to be cut and manufactured exclusively for such local demand and so disposed of, that any infraction of this condition, directly or indirectly may be followed in each case by cancellation of authority to cut timber or trees on the lands so set apart for the purpose above mentioned, and may be restored to the license from which the same were withdrawn."

The annual report of Hon. R. W. Scott, Commissioner of Crown Lands, for 1872, has the following explanation of the policy pursued by the Provincial Government with regard to the Crown domain: "The policy of

placing under license the area disposed of at the late sale has been questioned on the ground that it was virtually locking up the country from settlement, and handing over absolutely to licentiates the timber which should have been retained as a permanent source of revenue to the Province; the fallacy of such objections must be apparent in the face of the following facts, viz., that the lands will be as open for sale after being covered by license as they were before the existence of such license, and that the timber which has hitherto yielde'd no appreciable contribution to the Provincial Treasury will now, as the result of the territory being placed under license, be a prolific source of revenue, permanent as the existence of the material from which it is derived.

An Aid to Settlement.

"It was fairly assumed also, that placing the lands under license was the only means of settling the country, and it is gratifying to know that all the settlers in the Algoma district approve of the sale, and believe it was the one thing necessary to stimulate the growth and development of that neglected part of Ontario."

The Commissioner then referred to previous efforts to settle the territory which had resulted in failure. Seven townships had been laid out in the most desirable sections upwards of ten years before, and land offered to settlers at 20c. per acre, but the average annual sales during that period had only amounted to 498 acres, and the greater part of the land sold was subsequently abandoned as unfit for cultivation. It therefore became evident that the only means of opening up the country for settlement was through lumbering enterprise. The report continued:—

"In view of the exceptional condition of the country, the timber being open to wholesale plunder along an uninhabited frontier, where every facility exists for easy transport of logs by towage to the shores of the United States, to prevent which would entail on the Department a large amount of outlay; the recurrent destruction of the valuable staple by fires, the facts as given with respect to the sale of lands, showing clearly that in the absence of some auxiliary inducement, it would be vain to expect them to be taken up for actual settlement, the adoption of such steps as would meet the exigency in its several phases became absolutely necessary.

"The only action open to the Department under the circumstances was to offer the Timber Berths for sale at public competition by which the territory would be placed in such a position that its resources could be properly and advantageously controlled, and hundreds of millions of feet of valuable lumber saved to the Province, which would otherwise be destroyed by fire or plundered and carried away."

Lake Superior Lands.

In order to supply the local demand for lumber on the North Shore of Lake Superior, owners of patented lands and purchasers of lands in that territory, were granted by Order-in-Council passed June 29th, 1872, the right to acquire the pine trees on their lands on making the additional payment of 50c. per acre. It was provided that in case they declined to purchase the pine trees upon their lands the Crown Lands Department might dispose of them at the same rate to other persons, or in case of their being more than one applicant, to the one paying the highest additional sum per acre for the pine.

SETTLER'S RIGHTS TO PINE TIMBER.

Lumbering and Settlement.—The Land Act of 1841.

One inevitable consequence of the failure to discriminate between agricultural and non-cultivable lands in the past, has been the frequent clashing of interests between the settler and the lumberman. The former having taken up land in a district covered by timber license found that after he had acquired full ownership in all other respects, the pine growing on his lot could be cut and carried away by the lumberman at his pleasure. The latter on his part complained that the value of his limit was continually being impaired by the inroads of settlers, who took advantage of the conditions of the land-granting system to obtain title of occupancy to lots with the object of clearing the land of its timber. In the earlier days of settlement the difficulties arising from this source were not serious, the incoming agricultural population naturally sought the most fertile and accessible areas, the operations of the lumbermen being largely confined to a region too distant and sterile to attract those in search of homesteads. Under the system then prevailing the lumberman explored the country until he found a heavily timbered area and then applied for a license, which he usually got on terms which involved a very trifling return to the public in proportion to the value of the privileges granted. When the Government began to realize the worth of the timber resources of this country, and to endeavor to secure for the public treasury a larger share of their value, they adopted a policy of as far as possible disposing of the pine before throwing the land open for settlement, and in laying out timber limits, included large tracts of agricultural land with the non-cultivable districts which formed the principal pine-producing area. Moreover, the operations of the lumbermen, continued for a series of years, tended of themselves to attract settlement in and around the pine woods. The men employed in the lumber camps often squatted in the neighborhood, made small clearings and raised a little produce during the summer, looking to employment in the shanties in the winter time as their main source of subsistence. Thus small settlements grew up, and as population throughout the Province increased and it became necessary for those seeking homes to look farther afield, the demands of those engaged in the lumber trade and the opening up of the country through their operations attracted many to the debateable ground. Some who took up land in the lumbering region no doubt had an eve to the value of the timber on their locations as affording the means of eking out a livelihood during their first years of occupancy, while in other cases the conditions of settlement were abused by those who merely wished to acquire a colorable title in order to strip the land of its timber without intending to establish themselves permanently as settlers. A survey of the legislation respecting the disposal of public land shows that it was many years after the union of the Provinces before the difficulties arising out of the conflicting interests of lumbermen and settlers became sufficiently pronounced to render it necessary to define their respective rights by legal enactment. "An Act for the Disposal of Public Lands" passed immediately after the union in 1841 prohibited the abuses which had prevailed to so grave an extent before the era of Responsible Government, in the indiscriminate granting of large tracts of land under various pretexts, by limiting free grants of land to fifty acres to be made only to actual settlers. Neither in this Act nor in an amending enactment passed in 1849 to remove doubts as to whether under the provisions of the former measure the Crown had power to release escheats and otherwise modify the law is there any mention

made of the settler's rights in the timber growing upon his land. In 1853 further legislation extended the area of lots under the free grant system to 100 acres, and among the provisions of the Act was one authorizing the Commissioner of Crown Lands to issue licenses of occupation to those intending to purchase and settle on public lands, giving them the right to occupy and maintain possession against trespassers as fully as they could do under patent. There is no reference in this Act to the right to cut timber, or any definition of the respective interests of the settler and lumberman. "An Act respecting the Sale and Management of Public Lands," adopted in 1860, however, contained the following substitute clause in regard to licenses of occupation:—

License of Occupation.

"The Commissioner of Crown Lands may issue under his hand and seal, to any person who has purchased or may purchase, or is permitted to occupy or who has been entrusted with the care or protection of any public land or who has received or been located on any public land as a free grant, an instrument in the form of a License of Occupation, and such person or the assignee, by an instrument registered under this or any former Act providing for registration in such cases, may take possession of and occupy the land therein comprised, subject to the conditions of such license and may thereunder, unless the same shall have been revoked or cancelled, maintain suits in law or equity against any wrongdoer or trespasser, as effectually as he could do under a patent from the Crown; and such License of Occupation shall be prima facie evidence for the purpose of possession by such person, or the assignee under an instrument registered as aforesaid in any such suit; but the same shall have no force against a License to cut timber existing at the time of the granting thereof."

This is the first enactment bearing on the respective claims of the license holder and the settler, and clearly determined to question so far at all events as the position of the latter was concerned prior to the issue of his patent. It was followed up by an Order-in-Council dated May 27, 1869, which defined the rights of the parties somewhat more closely as follows:—

Settler's Right to Cut Timber.

"All Pine Trees growing on or being upon any Public Land hereafter to be sold, and which at the time of such sale, or previously, was included in any Timber License, shall be considered as reserved from such sale, and such land shall be subject to any Timber License, covering or including such land, in force at the time of sale; and such trees may be cut and removed from such land, under the authority of any such Timber License, while lawfully in force, but the purchaser at such sale or those claiming under him or her, may cut and use such trees as may be necessary for the purpose of building, fencing, and fuel on the land so purchased, and may also cut and dispose of all trees required to be removed in actually clearing said land for cultivation, but no pine trees except for the necessary building fencing and fuel as aforesaid shall be cut beyond the limit of such actual clearing before the issuing of the patent for such land, and all pine trees so cut and disposed of (except for the necessary building, fencing and fuel as aforesaid) shall be subject to the payment of the same dues as are at the time payable by the holders of licenses to cut timber or saw logs.

"All trees remaining on the land at the time the Patent issues shall

pass to the Patentee.

"Provided however, that this order shall not apply to any land to be sold as mining land under "The General Mining Act of 1869," nor to land to be sold to any Free Grant Locatee under the Regulation or Order-in-Council bearing date this day."

Free Grants Act of 1868.

The "Free Grants and Homesteads Act of 1868," providing for the setting apart of land for Free Grants to actual settlers expressly reserved to the Crown all pine trees upon such locations, with the customary exception of timber for building, fencing, and fuel and those trees necessarily removed in clearing the land. All other pine trees cut before the issue of the patent were to be subject to timber dues. Trees remaining on the land at the time the patent issued were to pass to the patentee. An Order-in-Council issued May 27th, 1869, provided that all pine trees on land located or sold under the Free Grants and Homesteads Act of 1868 should be subject to any timber license in force at the time of location or sale, or granted within five years subsequently and might at any time before the issue of the patent be cut and removed.

Licenses covering Free Grants.

Doubts arose as to the construction of the Free Grants and Homesteads Act of 1868, which rendered uncertain the right of the Commissioner of Crown Lands to issue licenses to cut timber upon lands located or sold to Free Grant Settlers and some litigation resulted. This necessitated the passage of an explanatory act in 1877, by which the authority of the Commissioner to grant licenses including such lots was clearly laid down, and existing licenses covering Free Grant territory continued subject to any conditions and regulations specially applicable to such territory.

Further amendments of the Free Grants and Homesteads Act were made in 1880 by a provision under which the patents for land located under the Act should contain a reservation of all pine trees on the land, and allowing the license-holder within whose limits the lot was included to enter the uncleared portion of the land, and cut and remove trees at any time during

Lumbermen's Dues to Settlers.

the continuance of his license. The patentee of land located or sold under the Act, was to be paid on all pine trees cut on his land, on which dues had been collected by the Crown, the sum of 25 cents per thousand feet board measure, for saw logs, and \$3 on each thousand cubic feet of square or waney timber. In 1890 the rate of payment was increased to 33 cents per thousand feet for saw logs and \$4 per thousand for square or waney timber.

Further Restrictions in 1899.

By an Order-in-Council dated the 18th day of May, 1899, it was provided that occupants, locatees, or purchasers of public lands, should not, unless under settlers' licenses or for clearing, fencing or building purposes be permitted to cut or dispose of timber until they had gone into actual bona fide occupation of the land, built a habitable house of at least 16 by 20 feet, continuously resided there for six months and cleared and put under cultivation at least two acres.

THE SQUARE TIMBER TRADE.

A resolution adopted by the Legislative Assembly on February 8th, 1878, called for returns showing the quantity of saw logs, square and waney pine timber cut on public and private lands for each of the years from 1868 to 1877 inclusive. The figures are chiefly of interest as indicating the great fluctuations of trade during this period, resulting mainly from the unsatisfactory condition of the British market. The totals for the years specified in feet, board measure, are as follows:

1868	177,390,000	1873	589,178,742
1869	375,620,200		406,185,320
1870			396,681,522
1871	358,096,400		294,729,327
1872	669,569,542		270,260,979

Great Waste.

The report of Hon. T. B. Pardee, Commissioner of Crown Lands for the year 1879, dealt at some length with the waste of valuable material involved in the manufacture of square and waney pine timber for shipment to Eng-Estimating that in squaring timber one-fourth of the wood was destroyed, the Commissioner calculated on the basis of the returns showing the production of square pine for the ten years 1868-1877, that a direct loss to the Province of \$3,577,500 for this period had been sustained or an annual loss of \$357,750. In addition, the loss owing to the destruction of timber by fires, which might have been confined to a limited area, and possibly extinguished before great damage had been done, had they not been fed by the debris of trees left to rot and dry, was incalculable. "It is time," continued the report, "that the Canadian lumberman engaged in the square pine husiness should open his eyes to the alarming waste of a material, the valve of which is increasing every year, (that in fact he is stripping his limits and disposing of his timber frequently at a loss, or at best during several years past, at a rate which seldom pays more than the cost of cutting down, squaring, drawing and taking to market, while at the same time he leaves in the woods as useless one-fourth of each tree he levels to the ground, one-half of the timber so left being the most valuable part of the tree); and see the necessity of turning his attention to saw milling operations as a more economical mode of manufacturing his timber, by which he would not only benefit himself by turning to profitable account what is now so wantonly wasted, but the Province generally by increasing the field of labor for its people, while the Provincial Treasury would derive additional revenue from the material saved and utilized * * * the material saved and utilized.

"It is to be hoped that those who hold timber limits and have confined their operations to the manufacture of square pine, will see the propriety and necessity of speedily reducing the production to the smallest possible extent, with the object of wholly withdrawing from the trade at an early day."

RIVERS AND STREAMS.

The use of all streams and rivers upon the waters of which timber could be floated to its destination, has from the outset of the timber trade been a most important consideration to the lumberman. Debarred of this means of getting out his annual cut, the possession of limits at a distance from the main water highways would be of little value to him. The right of the

licensee to use all such watercourses contiguous to his property, whether originally adapted for floating timber or capable of being made so by the construction of slides, the removal of obstacles to navigation or other improvements, is in fact essential to the utilization of the timber growing on the higher and more remote areas, and its refusal would render lumbering over a large proportion of the public Domain an unprofitable pursuit.

Caldwell vs. McLaren.

In the year 1881 a question of vital interest to the lumber trade was raised in connection with the right of one lumberman to use floatable streams which had been improved by another, who regarded them as his private property. Peter McLaren, who had made improvements on two streams, tributaries of the Mississippi river in Lanark county, refused to permit W. C. Caldwell, another lumberman, to run his logs over the improvements. The matter came before the courts and streams were held to be private property. As no fewer than 234 streams in the Province were in the same category, this decision, if allowed to stand, would have had a paralyzing effect upon the lumber trade, as the berths upon the upper waters of these streams could at any time be cut off from access to navigable waters at the will of the riparian owners below them. In the public interest, the Ontario Legislature, at the session of 1881, passed an Act settling the question, by giving every one the right to float logs and timber down rivers, streams and creeks, but providing for the payment of reasonable tolls for the use of improvements. Before giving the text of this notable and fiercely contested measure, which for some years constituted one of the principal issues in Ontario politics, it may be well to glance at previous legislation on the same subject.

The earliest Act dealing with the floating of lumber on streams is "an act to provide for the construction of aprons to mill dams over certain streams in this Province," passed in 1828. After reciting that "whereas it is expedient and found necessary to afford facility to the inhabitants of this Province engaged in the lumber trade, in conveying their rafts to market as well as for the ascent of fish in various streams now obstructed by mill dams, for the accommodation of those residing at a distance from the mouths thereof," it enacts as follows:

"That from and after the first day of May in the year of our Lord, one thousand eight hundred and twenty-nine, every owner or occupier or owners or occupiers of any mill dam which is, or may be legally erected, or where timber is usually brought down the stream on which such mill dam is erected, or where salmon or pickerel abound therein in this Province, who shall neglect to construct or erect a good and sufficient apron to his or their dam as hereinafter set forth, shall for such offence, yearly and every year, forfeit and pay the sum of twenty-five pounds of current money of this Province, one moiety thereof to His Majesty, his heirs and successors for the public uses of the said Province, and the support of the Government thereof, and the other moiety of the said sum to any person who shall sue for the same in any of His Majesty's courts of record within this Province.

Improvements to Dams.

"And be 'it further enacted by the authority aforesaid—that every such apron shall be erected and constructed in the following manner, that is to say: such apron shall not be less than eighteen feet wide, by an inclined plane of twenty-four feet eight inches, to a perpendicular of six feet, and

so in proportion to the height, where the width of the stream will admit of it, and where such stream or dam is less than fifteen feet wide, the whole dam shall be aproped in a like manner, with the same inclined plane."

This Act was amended by an Act of the Canadian Parliament in 1849. The most important section of this later measure is the following, defining

the right of the public to use streams for floating timber:

Floatable Streams Common to all.

"And be it enacted, that it shall be lawful for all persons to float saw logs and other Timber, Rafts and Craft down all streams in Upper Canada, during the Spring, Summer and Autumn freshets, and that no person shall by felling trees or placing any other obstruction in or across such stream prevent the passage thereof. Provided always that no person using such stream, in manner and for the purposes aforesaid, shall alter, injure or destroy, any Dam or other useful erection in or upon the bed of or across any such stream, or to do any unnecessary damage thereto or on the Banks of such Stream. Provided there shall be a convenient Apron, Slides, Gate, Lock, or opening in any such Dam or other structure, made for the passage of all Saw logs and other Timber, Rafts and Crafts authorized to be floated down such streams as aforesaid."

The Act of 1849 was sufficiently clear as to the right of the public to use "floatable" streams, but left untouched the point as to whether streams which required improvements to make them available for floating timber could be used for that purpose by anyone other than the owner, and if so, on what terms. The "Act for Protecting the Public Interest in Rivers, Streams and Creeks," first adopted in 1881 as the outcome of the McLaren

vs. Caldwell controversy, reads as follows:

The Streams Bill of 1881.

- 1. So far as the Legislature of Ontario has authority, all persons shall, subject to the provisions of this Act contained, have, and are hereby declared always to have had, during the spring, summer and autumn freshets, the right to and may float and transmit saw logs and all other timber of every kind, and all rafts and crafts, down all rivers, creeks and streams in respect of which the Legislature of Ontario has authority to give this power and in case it may be necessary to remove any obstruction from such river, creek or stream, or construct any apron, dam, slide, gate-lock, boom, or other work therein or thereon, necessary to facilitate the floating and transmitting such saw logs and other timber, rafts or crafts, then it shall be lawful for the person requiring so to float and transmit such saw logs and other timber, rafts and crafts, and it is hereby declared always to have been lawful, to remove such obstruction, and to construct such apron, dam, slide, gate-lock, boom or other work necessary for the purposes aforesaid, doing no unnecessary damage to the said river, creek or stream, or to the banks thereof.
- 2. In case any person shall construct in or upon such river, creek, or stream, any apron, dam, slide, gate-lock, boom or other work, necessary to facilitate the floating or transmission of saw logs or other timber, rafts, or crafts, down any such river, creek or stream, which was not navigable or floatable before such improvements were made, or shall blast rocks, or remove shoals or other impediments, or otherwise improve the floatability of such river, creek or stream, such person shall not have the exclusive right to the use of such river, creek or stream, or to such constructions and

improvements; but all persons shall have, during the spring, summer and autumn freshets, the right to float and transmit saw logs and other timber, rafts or crafts, down all such rivers, creeks or streams, and through and over such constructions and improvements, doing no unnecessary damage to the said constructions and improvements, or to the banks of the said rivers, creeks or streams, subject to the payment to the person who has made such constructions and improvements, of reasonable tolls.

- 3. The foregoing sections, and all the rights therein given, and all the provisions therein made and contained, shall extend and apply to all rivers, creeks and streams, mentioned in the first section of this Act, and to all constructions and improvement made therein or thereon, whether the bed of such river, creek or stream, or the land through which the same runs, has been granted by the Crown or not, and if granted by the Crown, shall be binding upon such grantees, their heirs, executors, administrators and assigns.
- 4. The Lieutenant-Governor in Council may fix the amounts which any person entitled to tolls under this Act shall be at liberty to charge on the saw logs and different kinds of timber, rafts or crafts, and may from time to time vary the same; and the Lieutenant-Governor in Council, in fixing such tolls, shall have regard to and take into consideration the original cost of such constructions and improvements, the amount required to maintain the same, and to cover interest upon the original cost, as well as such other matters as under all circumstances may, to the Lieutenant-Governor in Council, seem just and equitable.
- 5. The foregoing provisions of this Act shall apply to all such constructions and improvements as may hitherto have been made, as well as to such as may be in course of construction, or shall hereafter be constructed.
- 6. Every person entitled to tolls under this Act shall have a lien upon the saw logs or other timber passing through or over such constructions or improvements, for the amount of such tolls, such lien to rank next after the lien (if any) which the Crown has for dues in respect to such logs or timber, and if such tolls are not paid, any Justice of the Peace having jurisdiction within or adjoining the locality in which such constructions or improvements are, shall, upon the oath of the owner of such constructions or improvements, or upon the oath of his agent, that the just tolls have not been paid, issue a warrant for the seizure of such logs or timber, or so much thereof as will be sufficient to satisfy the tolls, which warrant shall be directed to any constable, or any person sworn in as a special constable for that purpose, at the discretion of the magistrate, and shall authorize the person to whom it is directed, if the tolls are not paid within fourteen days from the date thereof, to sell, subject to the lien of the Crown (if any) for dues, the said logs or timber, and out of the proceeds to pay such tolls, together with the costs of the warrant and sale, rendering the surplus on demand to the owner: Provided always that the authority to issue such warrant by such Justice of the Peace shall not exist after the expiration of one month from the time of passage of such logs or timber through or over any of such constructions or improvements.
- 7. Nothing in this Act contained shall be construed as interfering with the powers or rights of any company formed under the Act respecting Joint Stock Companies, for the construction of works to facilitate the transmission of timber down rivers and streams, being chapter one hundred and fifty-three of the Revised Statutes of Ontario, or with mill-dams, or the right to erect and maintain mill dams on streams; and the law respecting mills and mill-dams being chapter one hundred and thirteen of the Revised

Statutes of Ontario, and any other law conferring rights in mill-dams shall

remain the same as if this Act had not been passed.

8. All persons driving saw logs, or other timber rafts, or crafts, down any such river, creek, or stream, shall have the right to go along the banks of any such river, creek, or stream, and to assist the passage of the timber over the same by all means usual among lumbermen, doing no unnecessary

damage to the banks of the said river, creek or stream.

9. Every person entitled to tolls under this Act may make rules and regulations for the purpose of regulating the safe and orderly transmission of saw-logs, timber, rafts or crafts over or through such constructions or improvements, but no such rules or regulations shall have any force or effect until approved of by the Lieutenant-Governor in Council, and the Lieutenant-Governor in Council may revoke and cancel such rules and regulations so made and approved, and from time to time approve of new rules and regulations, which the person so entitled to tolls, as aforesaid, shall have the power to make.

10. If any suit is now pending the result of which will be changed by the passage of this Act, the court or any judge of such courts, having authority over such suit, or over the costs, may order the costs of the suit, or any part thereof, to be paid by the party who would have been required to pay

such costs if this Act had not been passed.

Act Disallowed.

The Act was disallowed by the Dominion Government which had taken Mr. McLaren's side in the controversy. The Ontario Legislature re-enacted the measure in 1882 and 1883, on each of which occasions the Dominion Government repeated its action. Simultaneously with the political struggle a legal conflict between the private contestants was going on in the Courts. When it reached the Privy Council the question was finally settled in favor of Caldwell. This legal victory decided the fate of the Act. When re-enacted for the fourth time in the year 1884 the Dominion Government yielded and allowed it to become law.

Slides and Dams.

Extensive provincial works have from time to time been undertaken in the construction of slides and the removal of obstacles to the floating of timber. The amount of public money expended on slides, etc., on the Ottawa River and its tributary streams up to the 1st of January, 1845, was An Act passed in that year made provision for levying tolls in connection with Public Works of this character, in accordance with which a schedule of slidage rates as authorized by the Governor in Council, was published in the Canada Gazette of May 3rd, 1845. The receipts for slidage dues on the Ottawa slides for 1846 were £946. The revenue from this source steadily increased with the growth of the lumber trade, until in 1866 the total receipts for slidage dues amounted to \$63,483. Since Confederation these dues have formed part of the revenue of the Dominion.

Timber Slide Companies.

The amount expended by private enterprise on improvements to facilitate the descent of timber down rivers and streams has considerably exceeded the public expenditure for that purpose. According to a return made on May 28th, 1853, by A. J. Russell, Surveyor of Crown Timber Licenses at Bytown, to an address of the Legislative Assembly, the

approximate outlay by private individuals for this purpose on the Ottawa and its tributaries amounted to £151,847. In the same year an act was passed to authorize the formation in Upper Canada of Joint Stock Companies "for the purpose of acquiring or constructing and maintaining any dam or dams, slide or slides, pier or piers, boom or booms, or other work or works necessary to facilitate the transmission of timber down any river or stream in Upper Canada, and for the purpose of blasting rocks, or dredging or removing shoals, or other impediments or otherwise of improving the navigation of such streams for the said purpose."

They were authorized to levy tolls upon timber passing downwards on a basis of 10 per cent. on the amount invested and the cost of maintaining

and superintending the works.

In 1855 the Act was extended to Lower Canada and some amendments made, the proportionate rate on saw logs being reduced to one-twelfth in

place of one-eighth of the amount charged on sticks of pine timber.

The powers of Timber Slide Companies have been considerably extended by subsequent legislation, and the regulations governing their proceedings assimilated to those of Joint Stock Companies generally. The Timber Slide Companies Act of 1881 provides that Companies incorporated under the Ontario Joint Stock Companies Letters Patent Act may be granted by the Lieutenant-Governor-in-Council the powers authorized by the Revised Statutes respecting Joint Stock Companies for the construction of works to facilitate the transmission of Timber down Rivers and Streams. The rate of dividend may be fixed in the letters patent at not more than 15 per cent., and in such case the Commissioner of Public Works in considering the tolls to be allowed, shall have regard to such rate, but no such rate shall be so fixed for a longer period than 10 years. The existence of any company may be limited to a fixed term of years by the letters patent and upon the expiration of this period all the dams, slides, piers, booms and other works constructed by the Company become the property of the Crown without compensation to the Company or the shareholders.

The driving of saw logs and the confusion and trouble arising from jams of logs in the water causing delay to the floating operations of other lumbermen and the mixing of logs belonging to different proprietors, was a frequent source of disputes and disagreements among lumbermen using the same stream. In 1887 the following Act was adopted by the Legislature to regulate the driving of saw logs and define the respective rights and

liabilities of the parties concerned.

ACT TO REGULATE LOG DRIVING.

(1) The following words wherever used in this Act have the following meaning, viz.:—

"Logs" mean and include saw logs timber, posts, ties, cordwood.

and other things being parts of trees.

"Water" means and includes lakes, ponds, rivers, creeks and streams.

streams.

(2) Any person putting, or causing to be put, into any water in this Province, logs, for the purpose of floating the same in, upon or down such water, shall make adequate provisions and put on a sufficient force of men to break, and shall make all reasonable endeavours to break jams of such logs and clear the same from the banks and shores of such water with reasonable despatch, and run and drive the same so as not to unnecessarily delay or hinder the removal, floating, running or driving of other logs, or unnecessarily obstruct the floating or navigation of such water.

3. In case of the neglect of any person to comply with the provisions of the preceding section, it shall be lawful for any other person or persons desiring to float, run or drive logs in, upon or down such water, and whose logs would be thereby obstructed, to cause such jams to be broken and such logs to be cleared from the banks and shores of such water, and to be floated, run and driven in, upon and down such water.

4. The person or persons causing such jams to be broken or such logs to be cleared, floated, run or driven, pursuant to the last preceding section, shall do the same with reasonable economy and despatch, and shall take reasonable care not to leave logs on the banks or shores, and shall have a lien upon the logs in the jam or so cleared, floated, run or driven for the reasonable charges and expenses of breaking the jams and the clearing, floating, driving, running, booming and keeping possession of such logs, and may take and keep possession of such logs or so much thereof as may be reasonably necessary to satisfy the amount of such charges and expenses, pending the decision by arbitration as hereinafter provided for. The person taking possession of logs under this section shall use all reasonable care not to take such logs beyond the place of their original destination, if known, but may securely boom and keep possession of the same at or above such place. The owner or person controlling such logs, if known, shall be forthwith notified of their whereabouts, and if satisfactory security te given for the amount of such charges and expenses, possession of the logs shall be given up.

5. When the logs of any person upon or in any water in this Province, or the banks or shores of such water, are so intermixed with logs of another person or persons, that the same cannot be conveniently separated for the purpose of being floated in, upon, or down, such water, then the several persons owning or controlling the intermixed logs, shall respectively make adequate provisions, and put on a fair proportion of the men required to break jams of such intermixed logs, and to clear the same from the banks and shores of such water with reasonable despatch, and to float, run and drive the same in, upon and down such water, and the costs and expenses thereof shall be borne by the parties in such proportions as they may agree upon, and in default of agreement as may be determined by arbitration as here-

inafter provided for.

6. In case of neglect of any person to comply with the provisions of the last preceding section, it shall be lawful for any other person or persons whose logs are intermixed, to put on a sufficient number of men to supply the deficiency and break jams of such intermixed logs, and to clear the same from the banks and shores of such water, and to float, run and drive

all such intermixed logs in, upon and down such water.

7. The person or persons supplying such deficiency and causing such jams to be broken, or such intermixed logs to be cleared, floated, run or driven pursuant to the last preceding section, shall do the same with reasonable economy and despatch, and shall take reasonable care not to leave logs on the banks or shores, and shall have a lien upon the logs owned or controlled by the person guilty of such neglect, for a fair proportion of the charges and expenses of breaking the jams, and the clearing, floating, running, driving, booming and keeping possession of such intermixed logs; and may take and keep possession of such logs, or so much thereof, as may be reasonably necessary to satisfy the amount of such fair proportion of charges and expenses pending the decision by arbitration as hereinafter provided for. The person taking possession of logs under this section shall use all reasonable care not to take such logs beyond the place of their original destination, if known, but may securely boom and keep possession of the same at or above such place. The owner or person controlling such logs,

if known, shall be forthwith notified of their whereabouts, and if satisfactory security be given for the amount of such proportion of charges and

expenses, possession of the logs shall be given up.

8. When logs of any person, upon or in any water in this Province, or the banks or shores of such water, are intermixed with logs of another person or persons, then any of the persons whose logs are intermixed, may at any time during the drive require his logs to be separated from the other logs at some suitable and convenient place, and after such separation he shall secure the same at his own cost and expense, in such manner as to allow free passage for such other logs; provided that when any logs so intermixed reach their places of original destination, if known, the same shall be separated from the other logs and after such separation the owner shall secure the same at his own cost and expense.

9. The several persons owning or controlling the intermixed logs shall respectively make adequate provisions and put on a fair proportion of men required to make the separation, the cost and expense of such separation shall be borne by the parties in such proportions as they may agree upon, and in default of agreement, as may be determined by arbitration as here-

inafter provided.

10. In case of neglect of any person to comply with the provisions of the last preceding section, it shall be lawful for any other person or persons, whose logs are intermixed, to put on a sufficient number of men to supply the deficiency, and the logs owned by or controlled by the person guilty of such neglect shall be subject to a lien in favor of the person or persons supplying the deficiency, for a fair proportion of the charges and expenses of making the separation, and for the reasonable charges and expenses of booming and keeping possession, and such person or persons may take and keep possession of such logs or so much thereof as may be reasonably necessary to satisfy the amount of such fair proportion of charges and expenses pending the decision by arbitration as hereinafter provided for. The person taking possession of logs under this section shall use all reasonable care not to take such logs beyond the place of their original destination, if known, but may securely boom and keep possession of the same at or above such place. The owner or person controlling such logs, shall be forthwith notified of their whereabouts, and if satisfactory security be given for the amount of such proportion of charges and expenses, possesion of the logs shall be given up.

11. The security referred to in sections 4, 7 and 10 may be by bond in form A in the schedule hereto, or by deposit of money, or in such other

way as the parties may agree upon.

12. If it be determined by arbitration as hereinafter provided for, that any person acting under the assumed authority of this Act, has without just cause taken possession of or detained or caused to be taken possession of or detained logs of another person, or has after offer of security which the arbitrators may think should have been accepted detained such logs, or has through want of reasonable care left logs of another person on the banks or shores or has taken logs of another person beyond the place of their original destination, contrary to the provisions of sections 4, 7 or 10, then such first mentioned person shall pay to such last mentioned person such damages as the arbitrators may determine.

13. The lien given by sections 4, 7 and 10 of this Act shall be subject to the lien (if any) of any person or corporation for tolls or dues for the use of any works or improvements made use of in running or driving such logs.

14. Nothing in this Act shall affect the liens or rights of the Crown

upon or in respect of any logs.

15. All claims, disputes and differences arising under this Act shall be determined by arbitration as hereinafter provided for and not by action

or suit at law or in equity.

16. The person claiming that another person has not complied with the provisions of this Act, or claiming payment of any charges or expenses under this Act, or claiming a lien upon any logs, or claiming damages under section 12, shall give to such other person, notice in writing, stating the substance of the claims made, and appointing an arbitrator and calling upon such other person to appoint an arbitrator within ten days after the service of such notice; if such other person does not, within such ten days, appoint an arbitrator, the Judge of the County or District Court of the county or district, or the Stipendiary Magistrate of the provisional county or the district, as the case may be, in which the logs in connection with which the claim or part of the claim is made, or the major portion of such logs are situate at the time of the service of such notice, shall, on the application of the nerson giving such notice, appoint a second arbitrator; the two arbitrators so appointed shall, within ten days after the appointment of the said second arbitrator, appoint a third, if such two arbitrators do not within such ten days appoint a third, the said Judge or Stipendiary Magistrate shall, on the application of either party, appoint such third arbitrator.

17. If any arbitrator refuses to act or becomes incapable of acting, or dies, and the parties do not concur in appointing a new arbitrator, the said Judge or Stipendiary Magistrate shall, on the application of either party, appoint such new arbitrator.

18. The parties may agree that the arbitration shall be by one arbitrator instead of by three, and they may either agree upon the arbitrator or may

apply to the said Judge or Stipendiary Magistrate to appoint one.

19. The person on whom a claim is made and notice of arbitration served, may at any time before the arbitration is entered upon or with leave of the arbitrators during the arbitration, give the claimant notice in writing by way of counterclaim, stating the substance of any claim arising under this Act, which such person may have against the claimant, and such counterclaim, unless barred under section 26, shall be determined in the arbitration and an award made with respect thereto.

20. The three arbitrators or the sole arbitrator, as the case may be, shall proceed with the arbitration with due despatch, and shall make their or his award in writing, under their or his hand within thirty days from the date of the appointment of such arbitrator, or the last of such three arbitrators, as the case may be. The parties may, by consent in writing, from time to time enlarge the time for making said award, or the said Judge or Stipendiary Magistrate may from time to time, either before or after the expiration of said time, enlarge the time for making said award.

21. The arbitrators or arbitrator may require the personal attendance and examination upon oath of the parties and their witnesses, and the production of all books and documents relating to the matters in question, and may determine by whom the expense of the arbitration, and the costs of the parties shall be paid, and the amount thereof; any costs or expenses payable to a person having a lien upon logs, by virtue of this Act shall be added to the amount of such lien.

22. Chapter 64 of the Revised Statutes of Ontario intituled an Act respecting the cost of Arbitrations applies to arbitrations under this Act.

23. The person or persons having a lien upon logs by virtue of this Act may sell the same in order to realize the amount of such lien, and of the costs, charges and expenses connected with the sale. The arbitrators, or arbitrator, shall determine either by their award, or by separate document,

the time, place and manner of such sale, and may, from time to time, give directions, in writing, respecting such sale, and the realization of such lien,

and of the costs, charges and expenses connected therewith.

24. The award and directions in writing of any two of the three arbitrators, or of the sole arbitrator, as the case may be, shall be final and binding upon, and shall be obeyed by the parties, and shall be valid, notwithstanding any want or defect of form, or other technical objection.

25. The said Judge or Stipendiary Magistrate, as the case may be, may, on the application of either party, grant an order to compel any person or persons to attend and give evidence upon the arbitration, and to produce all books and documents relating to the matters in dispute, and obedience to such order may be enforced in the same way as obedience to any order of such Judge or Stipendiary Magistrate made in a cause or matter pending before him in court may be enforced, and the person neglecting or refusing, without lawful excuse, to obey such order shall be liable to an action by any person aggrieved by such neglect or refusal for the damages sustained by him thereby.

26. All claims arising under this Act shall be made by notice in writing under section 16, within one year after the same have arisen, otherwise

they shall be barred.

27. The Lieutenant-Governor-in-Council may, from time to time by proclamation published in the Ontario Gazette, declare that any portion or portions of this Province, or any water therein shall, until further proclamation, be exempt from the operation of this Act, and thereupon the same shall be exempt accordingly.

28. Any portion or portions of the Province, or any water therein exempted by proclamation from the operation of this Act, may by proclamation published in the Ontario Gazette, be again brought within its opera-

tion until further proclamation, and so on from time to time.

29. This Act may be cited and known as The Saw Logs Driving Act, 1887.

Timber Dues Increased.

In 1887 some important changes in the tariff of timber dues were made. Standing timber had considerably increased in value since the rates then in operation were fixed, and the public interest required that the Province should receive a share in the increased value. Accordingly the rate of dues upon saw logs was advanced from 75 cents per thousand feet to \$1.00, or $33\frac{1}{2}$ per cent., and upon square and waney timber from $1\frac{1}{4}$ cent per cubic foot to 2 cents. At the same time the ground rent was increased from \$2 per mile to \$3, the changes taking effect on May 1st. An extensive sale of timber limits was held in 1887, certain territory on the Muskoka and Petewawa waters having become dangerously exposed to fire owing to the advance of settlement. An area of 459 square miles was disposed of, the prices being considerably in advance of those obtained at any previous sale. A sum of \$1,313,755 was realized, being an average of \$2,859 per mile.

Licenses to Cut Pine Only.

In 1892 a radical departure in the methods of disposing of timber limits was effected by restricting the rights conferred by new licenses to the cutting of red and white pine only. All licenses issued previous to this date had included all kinds of timber, but it was pretty generally understood that the lumbermen in estimating the value of limits only took

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the pine into account, regarding the small quantities of hemlock, spruce and cedar which might be available as so much to the good, and attaching no value to the various hardwoods. The Department therefore, -anticipating that in future these kinds of timber, which, under the old system were practically thrown in with the pine for nothing, might prove a valuable asset, which might be retained in their hands without lessening the revenue derivable from the pine timber—put up for sale under licenses, including the pine only, timber berths situated in the Nipissing, Algoma, Thunder Bay and Rainy River districts, aggregating 633 square miles, on which the dues were increased one-fourth, viz.: on saw logs, from \$1 to 1.25 per thousand feet, board meaure, and on square timber from \$20 to \$25 thousand feet cubic. The high prices received notwithstanding this increase, which exceeded by a large amount those of any previous sale, afforded sufficient evidence of the correctness of the position assumed. The total amount received was \$2,315,000, an average of \$3,657.18 per square mile. highest figure obtained at any former sale was in 1887, when the heaviest individual bonus paid was \$6,300, and the average for all the berths disposed of at that time was \$2,859.

Algonquin Park Timber.

A portion of the territory disposed of in 1892 for which the highest price was paid was included in the boundaries of Algonquin Park. of the area of this reserve, which had been previously sold, was under the old conditions of license, giving the limit-holder the right to cut all kinds of timber. Being apprehensive of danger to the Park as a game and timber preserve, should the lumbermen claim their full privileges under the old form of license, the Government, under the power contained in all licenses, reserving the authority to alter the regulations, in 1898 withdrew the right to cut other woods than pine, in connection with all licenses for limits included within the area of the Park. Naturally there was some dissatisfaction among the limit owners, as the birch and spruce timber was beginning to be valuable, but as these trees were not of much marketable value at the time that the original purchase was made, the change was not felt to be a very great hardship and the regulation remains. As regards other licenses for berths sold previous to 1892 conveying the right to cut all kinds of timber, outside of Algonquin Park no change has been made as yet, and the yearly renewal for these limits is without restriction.

ONTARIO CULLERS ACT.

An Act providing for the licensing of Cullers in Ontario was adopted in 1890. Under its provisions it was made incumbent upon all persons cutting saw logs on Crown Lands to cause to be kept such records and books as required by the Crown Lands Department, to be open at all times to inspection by any Crown Timber Agent, Crown Timber ranger, or other officer of the Department, and to be attested under oath at the end of the season by the person who has made the entries therein and handed over to the officer of the Department authorized to receive the same. The Lieutenant-Governor in Council was authorized to appoint a board or boards of examiners each consisting of three persons, to test the ability and knowledge of all applicants desiring to be licensed to cull and measure saw logs cut on Crown Lands. A license may be issued to any person reported by a board

of examiners as competent to perform the duties of culler. After the passing of the act no person other than a licensed culler was to make measurement of saw logs cut on Crown Lands for the purposes of a return to the Crown Lands Department unless in cases where the services of a licensed culler were not procurable, when the Commissioner of Crown Lands was authorized to issue a temporary permit, to any trustworthy and skilled person to act as culler. The duties of cullers were thus defined by the Act:

"It shall be the duty of every culler to measure fairly and correctly to the best of his skill, knowledge and ability, all saw-logs which he may be employed to measure, making only such deductions as are necessary to allow for the rots or other defects, and to enter in his book of record, for the purpose of return to the Crown Lands Department, what he believes to be the proper contents of the log, noting also the number of saw logs rejected as worthless, commonly called culls.

"Upon all logs culled or rejected as wholly worthless he shall write the word "cull" in plain letters, but he shall not mark "cull" upon any log which is intended to be hauled to any river, lake or stream for the purpose of

being driven to a mill."

All licensed cullers were required to submit their books and records of measurement for the inspection of Crown Lands agents or other officials of the Department when called upon to do so, to give all information asked for if in their power, and furnish statements as required by the Department or its agents. At the end of the season every culler was required to make a sworn statement to the Department, showing the number of pieces measured and accepted and their dimensions, and also the number of pieces rejected as worthless. The penalty for neglect or refusal to carry out the provisions of the act was cancellation of the culler's license. Improper measurements or the making of false returns were similarly punishable with an additional penalty of a fine of not less than \$20 or more than \$100. The section forbidding unlicensed persons to make measurements of saw logs for the purposes of returns to the Crown Lands Department were not applicable to the operations of any lumber company, person or firm whose gross annual output was under 250,000 feet, board measure.

The Act was brought into force on January 1st, 1891, by a proclama-

tion by the Lieutenant-Governor in Council.

WOODMAN'S LIEN FOR WAGES.

By "The Woodman's Lien for Wages Act," enacted at the session of 1891, laborers engaged in lumbering in some districts were accorded similar rights to those extended to mechanics by existing legislation, by giving them a lien on the produce of their labor for the amount due as wages. The 3rd

section of this measure provides that:

"Any person performing any labor, service or services in connection with any logs or timber in the districts of Algoma, Thunder Bay and Rainy River, shall have a lien thereon for the amount due for such labor, service or services, and the same shall be deemed a first lien or charge on such logs or timber, and shall have precedence of all other claims or liens thereon, except any lien or claim which the Crown may have upon such logs or timber for or in respect of any dues or charges, or which any timber slide company or owner of slides and booms may have thereon for or in respect of tells."

The Act provides for the issue of an attachment, on an affidavit by the claimant that he has good reason to believe that the logs or timber are

about being removed from the Province, or that the person indebted to him has absconded with intent to defraud his creditors, or that the saw logs or timber are about being cut into lumber so that they cannot be identified. In case the claim is established on a hearing before a Judge, the logs or timber so in default of payment are to be sold in the same manner as goods taken in execution for the satisfaction of the judgment. Any number of lien-holders may join in taking proceedings under the Act.

By an amendment adopted in 1894, the provisions of the Act were

extended to the districts of Muskoka and Parry Sound.

FOREST PROTECTION AND REFORESTRATION.

FIRE PROTECTION.

The great danger to the forests is the ravages of fire, which becomes largely increased with the advance of settlement, the extension of the railway system and the presence during the summer season of large numbers of persons in the woods. Great inroads have been made upon our woodland resources by devastating forest fires and with the increasing value of timber, the necessity of taking some action to check this cause of destruction, early

forced itself upon the attention of the Government.

In 1859, Mr. P. M. Partridge, Superintendent of Woods and Forests, appears to have referred to the question of fire protection in a general report made to the Commissioner of Crown Lands. This report, which was not printed, does not seem to have been productive of any legislation on the subject, and in 1867, the matter having become urgent because of the greater activity among mining prospectors in the Hastings and Ottawa districts, Mr. Partridge again addressed the Commissioner of Crown Lands as follows:—

MEMORANDUM FOR THE HON. THE COMMISSIONER OF CROWN LANDS.

The undersigned respectfully submits the accompanying extract from his General Report of 24th March, 1859. "On the necessity of taking some immediate action for the preservation of the Forests of the country from fires."

As it is probable that very extensive prospecting operations for gold will be carried on next summer in parts of the territories of Messrs. Way and Russell and that the numerous camps and other fires which the prospectors will undoubtedly make use of, will be additional sources of danger to our Forests, the undersigned would suggest that it is desirable that such precautionary measures be taken as the present laws admit of, and the interests of the lumber trade and the country require.

If a Gold Mining Division is organized, and an Inspector appointed, he might be clothed with such powers as the laws allow. The powers mentioned in Section 3 of the Gold Mining Act (27-28 Vict. Cap. 9,) taken in connection with sections 25 and 28 of Cap. 93, Con. Stats., Canada, might perhaps be made applicable in the premises. A cautionary clause might

be inserted in all Gold Mining Licenses for the future.

(Sgd.) P. M. Partridge, Supt. Woods and Forests. Ottawa, 21st February, 1867.

WOODS AND FORESTS,

P. S.—The undersigned had intended to add that the Law Officers of the Crown might be consulted as to what steps should be taken.

P. M. P.

The powers referred to in the Gold Mining Act of 27-28 Vict., were those vesting the Inspectors in Mining Districts with magisterial powers charged with the enforcement of the law, and sections 25 and 28 of Cap. 93 Consolidated Statutes of Canada refer to the punishment for arson by which any one doing malicious damages to trees or shrubs on private grounds or elsewhere to the extent of twenty cents were liable to fine or imprisonment.

This memorandum appeared to meet with the approval of the Commissioner, Hon. A. Campbell, who added to it the following instructions:—

(1) Create a gold mining division to embrace the townships.

(2) Prepare a form to be used as an appendix to such license, making provision as far as possible against danger from fires.

(3) Instruct Inspector to serve and give him reference to the sections

of the 93 chap. Consolidated Stat. quoted by Mr. Partridge.

(4) In townships where no municipal organization exists, persons may be selected as suggested by Mr. Partridge for the duty he proposes (persons left by lumbermen in charge of their farms would probably be found very suitable men.)

(Sgd.) A. C.

23rd Feb., '67.

No action appears to have been taken at this time, perhaps owing to the pressure of business consequent upon the Confederation of the Provinces consummated on July 1st of that year, (1867) when the Government of Upper Canada was permanently moved to Toronto.

Prevention of Forest Fires.

During the session of 1878 there was enacted the first legislation looking to the suppression, or rather, the prevention of forest fires. This was entitled, "An Act to Preserve the Forests from destruction by fire."

Lt.-Governor may proclaim a fire district.

1. The Lieutenant-Governor may, by proclamation made by him from time to time, issued by and with the advice and consent of the Executive Council, declare any portion or part of the Province of Ontario to be a fire district.

Publication of fire district.

2. Every proclamation under this Act shall be published in the Ontario Gazette, and such portion or part of the Province as is mentioned and declared to be a fire district in and by the said proclamation, shall, from and after the said publication, become a fire district within the meaning and for the purposes of this Act.

Revocation.

3. Every such portion or part of the Province mentioned in such proclamation shall cease to be a fire district upon the revocation by the Lieutenant-Governor-in-Council of the proclamation by which it was created.

Fires not to be started except for certain purposes and in certain

periods.

4. It shall not be lawful for any person to set out, or cause to be set out or started, any fire in or near the woods within any fire district between the first day of April and the first day of November in any year, except for the purposes of clearing land, cooking, obtaining warmth, or for some industrial purposes, the obligations and precautions imposed by the following sections shall be observed.

Precautions to be taken in case of clearing land. 5. Every person who shall, between the first day of April and the first day of November, make or start a fire within such fire district for the purpose of clearing land shall exercise and observe

every reasonable care and precaution in the making and starting of such fire, and in the managing of and caring for the same after it has been made and started, in order to prevent such fire from spreading or burning up the timber and forests surrounding the place where it has been so made and started.

6. Every person who shall between the first day of April and the Precautions in case of cook first day of November, make or start within such fire district a ing, etc. fire in the forest, or at a distance of less than half a mile therefrom, or upon any island for cooking, obtaining warmth, or for any

industrial purpose, shall—

(1) Select a locality in the neighborhood in which there is the smallest quantity of vegetable matter, dead wood, branches, brushwood, dry leaves, or resinous trees;

(2) Clear the place in which he is about to light the fire by removing all vegetable matter, dead trees, branches, brushwood and dry leaves from the soil within a radius of ten feet from the fire;

(3) Exercise and observe every reasonable care and precaution to prevent such fire from spreading, and carefully extinguish the

same before quitting the place.

7. Any person who shall throw or drop any burning match, ashes Precautions in of a pipe, lighted cigar, or any other burning substance, or who matches, burnshall discharge fire-arms within such fire district, shall be subject stances, etc. to the pains and penalties imposed by this Act, if he neglect completely to extinguish before leaving the spot the fire of such match, ashes of a pipe, cigar, wadding of the fire-arm, or other burning substance.

8. Every person in charge of any drive of timber, survey or act to be read exploring party or of any other party requiring camp-fires, for by heads of cooking or other purposes within such fire district, shall provide berers, etc. himself with a copy of this Act, and shall call his men together and cause said Act to be read in their hearing, and explained to them at least once in each week during the continuance of such work or service.

9. All locomotive engines used on any railway which passes Precautions as to locomothrough any such fire district or any part of it, shall, by the company using the same, be provided with and have in use all the most approved and efficient means used to prevent the escape of fire from the furnace or ash-pan of such engines, and that the smoke stack of each locomotive engine so used shall be provided with a bonnet or screen of iron or steel wire netting, the size of the wire used in making the netting to be not less than number nineteen of the Birmingham wire gauge, or three sixty-fourths parts of an inch in diameter, and shall contain in each inch square at least eleven wires each way at right angles to each other, that is in all twenty-two wires to the inch square.

10. It shall be the duty of every engine driver in charge of a Duty of locomotive engine passing over any such railway within the limits engine drivers. of any such fire district, to see that all such appliances as abovementioned are properly used and applied so as to prevent the unnecessary escape of fire from any such engine as far as it is reasonably possible to do so.

11. Whosoever unlawfully neglects or refuses to comply with the Penalty for requirements of this Act in any manner whatsoever, shall be liable ance with this upon a conviction before any justice of the peace to a penalty not Act. exceeding fifty dollars over and above the costs of prosecution, and

in default of payment of such fine and costs, the offender shall be imprisoned in the common gool for a period not exceeding three calendar months; and any railway company permitting any locomotive engine to be run in violation of the provisions of the ninth section of this Act shall be liable to a penalty of one hundred dollars for each offence, to be recovered with costs in any court of competent jurisdiction.

Time for bringing action.

12. Every suit for any contravention of this Act shall be commenced within three calendar months immediately following such contravention.

Disposal of

13. All fines and penalties imposed and collected under this Act shall be paid one-half to the complainant or prosecutor and the other half to Her Majesty for the public use of the Province.

Government

14. It shall be the special duty of every Crown Land agent, force this Act. Woods and Forest agent, Free Grant agent, and bush ranger, to enforce the provisions and requirements of this Act, and in all cases coming within the knowledge of any such agent or bush ranger to prosecute every person guilty of a breach of any of the provisions and requirements of the same.

Act not to interfere with right of action for damages occasioned by fire.

15. Nothing in this Act contained shall be held to limit or interfere with the right of any party to bring and maintain a civil action for damages occasioned by fire, and such right shall remain and exist as though this Act had not been passed.

Under this Act the following "Fire Districts" were created.

DESCRIPTION OF "FIRE DISTRICTS" UNDER CAP. 23 OF THE STATUTES OF ONTARIO.

District No. 1.—Commencing at a point on the north shore of Lake Huron where Provincial Land Surveyor Albert P. Salter's meridian line between ranges numbers twenty-one and twenty-two west intersects the water's edge, said point being the southwest angle of the Township of Plummer; thence easterly, following the turnings and windings of the shore along the water's edge of Lake Huron and the Georgian Bay to the mouth of French River; thence southeasterly, along the easterly shore of the Georgian Bay, and taking in Parry Island, to the northwest angle of the Township of Matchedash: thence southeasterly along the westerly boundaries of the Townships of Matchedash and North Orillia to the southwest angle of North Orillia; thence northeasterly along the southerly boundary of North Orillia to the waters of Lake Couchiching; thence easterly across said lake to the southwest angle of the Township of Rama; thence easterly along the south boundaries of the Townships of Rama, Dalton, Digby and Lutterworth to the northwest angle of the Township of Galway; thence southerly along the westerly boundaries of the Townships of Galway and Harvey to the southwest angle of Harvey; thence easterly along the south boundaries of the Townships of Harvey, Burleigh, Methuen, Lake and Tudor, to the northwest angle of the Township of Elzevir; thence southerly along the west boundary of Elzevir to the southwest angle of said township; thence easterly along the south boundaries of the Townships of Elzevir, Kaladar, Kennebec, Olden, Oso and South Sherbrooke, to the southeast angle of the Township of South Sherbrooke; thence northwesterly along the easterly boundaries of the Townships of South and North Sherbrooke to the southerly boundary of the Township of Lavant; thence northeasterly along the southerly boundaries of the Townships of Lavant and Darling, to the southeasterly angle of the Township of Darling; thence northwesterly along the easterly boundaries of the Townships of Darling and Bagot to the northeasterly angle of the Township of Bagot; thence southwesterly along the northerly boundaries of the Townships of Bagot and Blithfield, to the easterly boundary of the Township of Brougham; thence northwesterly along the easterly boundaries of the Townships of Brougham, Grattan, Wilberforce and Alice, to the waters of the Upper Allumette Lake; thence northwesterly, following the water's edge of said lake and the Ottawa River to the head of Lake Temiscamingue; thence due north along the boundary, between the Province of Ontario and Quebec to the northern boundary of the Province of Ontario; thence westerly along the said northern boundary to its intersection with the production northerly of Provincial Land Surveyor Albert P. Salter's meridian line between the said ranges numbers twenty-one and twenty-two west, and thence southerly along said meridian line produced to the place of beginning.

District No. 2.—All that part of the said Province lying west of Provincial Land Surveyor Albert P. Salter's meridian line between ranges twenty-one and twenty-two west, near Bruce Mines, in the District of Algoma, and west of the said meridian line produced to the northern boundary of the Province, the said meridian line being the western boundary of the Fire District established by the Proclamation of March 27th, 1878.

of the Fire District established by the Proclamation of March 27th, 1878. It will be observed that this Act applies only to settled districts and portions of the Province under process of settlement, while no provision was made for protection of timber limits not under municipal government, where the losses from fire were frequent and heavy, particularly after lumbering operations and the consequent inflammable debris covering the forest floor.

Fire Ranging System Proposed.

In 1884 the great loss from fire becoming increasingly apparent, Mr. Aubrey White, then chief clerk of the Woods and Forests Branch of the Crown Lands Department, addressed the following memorandum to the Commissioner of Crown Lands.

TORONTO, March 30th, 1885

SIR,—I take the liberty of drawing your attention to the great destruction of the timber wealth of this Province, which is caused mainly by the careless setting out of fire at dangerous points in the forest during the heat of summer by settlers, lumbermen, hunters, explorers and others, which, though of apparently small amount when started, have often become vast conflagrations, laying waste miles of the forest, and destroying untold millions worth of public property.

I am well aware that this matter has for some time been a cause of much anxious consideration to you, and it is not to dwell upon the necessity for taking some action—as that is universally admitted—that I now address you, but to submit for your consideration a plan or system under which much may be done to prevent such numerous and extensive fires as we have witnessed in the past, by exercising some supervision over the public domain, whereby, as far as possible, the starting of fires—except in cases of necessity—may be prevented, and fires which are assuming dangerous proportions may be controlled or extinguished, and generally taking such action as will, with a reasonable expenditure of money, reduce to a minimum the loss of timber by bush fires.

The period of the year during which this supervision would be required—which may be called the dangerous period—is included between the 1st day of May and the 1st day of October, as between these dates the bush, as a rule, is dry and inflammable, and fire runs with great celerity—while dur-

ing the rest of the year, extending from October to May, the ground is covered with snow, or the moisture in the bush is such as to render any extensive fire impossible.

I would, therefore, suggest that during the dangerous period of each year, a certain number of men, to be called Fire Rangers, shall be stationed at points in the licensed and unlicensed lands of the Province, where from settlement, railway construction, lumbering or any other cause, fire is so frequently used as to be a source of danger.

There is great difficulty in arriving at an accurate estimate of the number of men required to protect a section of country, let alone the whole Province, as some limits, owing to the nature of the bush, prevalence of lakes, streams and swamps, sparse settlements, etc., will not require as close supervision as others, therefore it would be well nigh impossible for me here to state the number of men which would be adequate to make the service effective. When we come to place the men, the licensees—who are quite familiar with the topography, etc., of their limits—will be able to give us a fairly correct idea of how many men will be necessary on each limit; thus we will be able to deal satisfactorily with the licensed area—leaving the unlicensed, unsettled, and consequently less exposed parts of the Province to be dealt with by the Department as necessity may arise. I would therefore recommend that each licensee should be notified that these men would be appointed, and invited to state how many men would be required to properly guard his limits, the Department having the right, after consultation with the license-holder affected, either to decrease or increase the number suggested, should it be thought expedient to do so.

The next point, and a most important one, is the selection of the men, as unless we get active, energetic men, of cool temper and good judgment, we shall not make the scheme a success; but in addition to the possession of the above qualities, they must have a thorough bush training, and be quite familiar with the limit on which they are stationed. Such men will know the various settlers upon a limit, their residences, habits-whether careless or the reverse—the parts of the limits which are most exposed or inflammable and need the closest watching, and above all, they will have practical ideas as to the proper steps to take in order to control or suppress Bearing all this in mind, and the necessity of having some further and more direct supervision over the men-scattered over an immense area as they will be—than could be exercised by the Department, 1 think the selection of them should also be left with the various licensees, as they will most certainly know the men best qualified to fulfill the duties of the position, the Department, of course, reserving the right to reject or remove any man considered unfit for the position, either from incapacity or through harassing of settlers, for where settlement and lumbering are going hand in hand, as they must do in this Province, it is of the utmost importance that no friction should arise between the settler and licensee, as should ill blood between the two classes be created, the whole system would prove unsuccessful, nor could any be devised which would preserve the forest if settlers were moved by malice to destroy it. The whole system presumes a good understanding between settler and licensee, and as I know that lumbermen now fully appreciate the folly and danger of quarrelling with settlers, I see no objection to allowing them to select the men, and what is of great importance is this, that these men feeling they owe their appointments to the licensee, and being under his supervision, there is every reason to believe that they will be more watchful and diligent than if they were only supervised by and responsible to the Department of Crown Lands.

The next point is the expense of the system and how it should be borne. It seems to me that the interests of the Government and the licensee should be regarded as equal in this matter, and that the whole thing being in the nature of an experiment, each, for the present, should bear half of the expenses not only of the Rangers but of suppression of fires and costs of prosecution under the Fire Act. The men should receive the following rates of pay, subject to reduction or increase as experience is gained: Ranger in charge of limit, three dollars per day; assistants, two dollars per day, which amount should be understood to cover board and all expenses, except such as are caused by special emergencies or enforcement of the Fire Act; they should be paid as their necessities required, which payments, and all expenses incurred, should be made upon application, forwarded through and recommended by the licensee. At the close of the season they should send in a proper account, upon a form supplied from here, and duly attested by affidavit, showing the number of days on duty and any special expenses incurred, with vouchers for the same, forwarding this account through the licensee, who should recommend it for payment. The licensee should then be debited with half the total expense, which should remain a charge on the limit, payable before renewal of license.

The clothing of the men with authority is the next consideration. This can be done by appointing them Bush and Fire Rangers and instructing them from here as such, which will make them ex-officio officers to enforce the provisions of the Fire Act, under section 14 of the said Act. This will arm them with all necessary authority, and lend official prestige to them which will be found a valuable factor in dealing with settlers. This completes the scheme so far as its creation and organization is concerned, and

we will now discuss their action in the field.

In instructing them from here it is not possible to frame rules which shall meet every emergency, and as they are presumed to be practical men it will be well to leave them plenty of latitude to deal with each case in such manner as their knowledge and presence on the spot may suggest; at the same time it will be only proper that I should indicate briefly some of the more important of the duties which I think would devolve upon them.

. Upon the ranger in charge of the limit will devolve the responsibility for any action taken in preventing or suppressing fires, and the expenses incurred in connection therewith. He will be furnished with a diary, in which he must enter the movements of himself and assistants, anything of interest or importance occurring on the limit, the the nature of the country and timber where they travel, etc., so that the Department and licensee may be fully informed about the limit; its topography and the timbered portions of it. This diary must be sent in at the end of the season, and should be accompanied with any report or recommendation in the direction of improving the scheme, which experience may suggest. Having been supplied with a number of posters of the Fire Act, they will, on reaching the scene of their duties, proceed to post them up in public and conspicuous places, and being also supplied with copies of the Act in pamphlet form. they will distribute these among settlers, residents or frequenters of the limit, explaining to them the provisions of the Act, calling particular attention to the penalty for the infraction thereof, and they will endeavor to inculcate a spirit of care and caution in setting out and preventing the spread of fires, informing them of their headquarters, inviting their cooperation and assistance to punish those who wilfully or carelessly disregard The Act, and doing everything, in short, to secure the sympathy, confidence and support of the settlers. By doing these things, and keeping continually on the move, they will impart a thorough knowledge of the Fire Act, and keep alive an active interest in its enforcement.

In travelling through a limit where the country is broken or circumstances will permit, an elevated position should occasionally be sought, so that a view of the surrounding country can be obtained, by which they will ascertain the locality of any fire, and in the event of such being discovered where there is not a settler, or if it should be assuming proportions which would indicate danger, they should proceed at once to the spot and take steps to extinguish or control it.

Where settlers are living in a pine country, and require to burn their fallows or choppings during a dry period, the Rangers should impress upon them the necessity of choosing a calm evening to set out fire, and if the surroundings are dangerous, he should ask to be notified of the time, so that he might be on the spot and prepared to call in assistance if the fire should be spreading.

In the event of an emergency arising, that is to say, should a fire assume such proportions as to be beyond control of the Ranger and his assistants, or should the springing up of a wind render it advisable that a fire should be promptly extinguished, the superintending Ranger should be instructed that he may engage such outside assistance as will enable him to accomplish this object, paying the men employed reasonable wages, such as ordinarily prevail in the locality. He should also at once advise the licensee and the Crown Lands Department, by telegraph, if possible, so that some one to represent one or both should be sent, if thought desirable. On suppression of the fire the Ranger in charge should report all the facts to the Department, accompanying his report with pay list of the men employed, shewing number of days, names and rates paid. These should be sent through the licensee, who should recommend them for payment, if reasonable, the Department then paying the expense and debiting half to the licensee.

The foregoing is a sketch of the organization, rates of pay and duties of the Fire Ranging force proposed to be created, which can be modified or improved as experience is gained. I have not thought it necessary to describe minutely the various modes of combating bush fires, as the necessary steps depend largely upon the extent of the fire, state of the weather, nature of the localities and timber, and the persons on the ground who will be familiar with these points can best be left to deal with each fire as it occurs. What I desire is to obtain your approval of the principle of establishing some body to prevent the fearful destruction that has been going on, and I think I may fairly claim that the scheme I have now suggested is simple, will be far-reaching and effective, and comparatively inexpensive. You are aware that last year we tried the experiment of sending one of our ordinary Ranging staff on Mr. McLaren's limits, and another on McLachlin Brothers, keeping them there during the summer, and that these gentlemen have written testifying to the good effect, thanking the Department, and sending their cheques for half the expense.

In conclusion, I would suggest that an appropriation of five thousand dollars be taken for this service this season, and I am well satisfied that once the scheme is put in practical operation, and its good effects are seen and understood, all criticism will be disarmed and no exception will be taken to a much larger appropriation next year.

I have the honor to be,

Sir,

Your obedient servant,

Circular to Limit-Holders

The course recommended by Mr. White was approved by the Commissioner, Hon. T. B. Pardee, and the same year the following circular was sent to limit-holders throughout the Province.

The Commissioner of Crown Lands, feeling the importance of creating some better organization for preventing the destruction of the forest by fire, has approved of a scheme, the principal points of which are herein stated to you, so that you may, should the position of your limits make it desirable, avail yourself of its advantages.

It is proposed that during the dangerous period, say from the first day of May to the first day of October in each year, there shall be placed on such limits as are exposed to danger a man or men who will be empowered and instructed to use every endeavor to prevent and suppress fires in every way possible, and the ranger who is placed in charge of a limit will be authorized to engage whatever help may be necessary to cope with a dangerous fire where prompt action is necessary; these men will be supplied with copies of the "Fire Act," and instructed to post them up in public and conspicuous places, to visit each person resident on the limit and give them, if thought advisable, a copy of the Act, explaining to them its provisions, penalty for its infraction, etc., and to endeavor to enlist their assistance and sympathy to make the Act effective.

The Department will leave the limit-holder to suggest the number of men who should be placed on his limit, and as it is of all things necessary that practical bushmen of good judgment and well acquainted with the limit should be selected, he, the limit-holder, will nominate the man to be placed in charge of the limit and his subordinates, if any, the Department reserving the right to limit the number of men to be employed on any limit and also to reject or remove any man whom it finds unfitted to discharge the duties of the position.

It is hoped that limit-holders will recognize the necessity for recommending men of good judgment and cool temper, who, while fully discharging their duties, will not harass or annoy settlers or others, as, if an animus is created in the breasts of the settlers the scheme will undoubtedly fail to effect the result expected. Limit-holders will be expected to exercise supervision over these men and see that they thoroughly and effectually perform their duties.

With respect to remuneration, the Department thinks that the man in charge of a limit should be paid three dollars a day, which should cover board and ordinary expenses, and where subordinates are required, that suitable men can be obtained at two dollars per day, which should also cover board and ordinary expenses; the men will be appointed bush and fire rangers and instructed from here so as to clothe them with authority under section 14 of the Fire Act, and a copy of the instructions will be furnished each limit-holder.

As the limit-holder is reaping a large proportion of the benefit, it is intended that he should bear one-half of the cost of men and expenses which may be incurred under this scheme.

The Department will pay wages and expenses and charge to each limitholder his proportion, which will be made a charge upon the limit, and an account will be rendered at the close of the season, when prompt payment must be made.

Should you desire to avail yourself of this scheme you will at once address a letter to the Department to that effect, stating the limits you wish

protected, the number of your license for current season, the number of men you would recommend to be employed, and submit a list of those you would recommend for appointment on your limits.

THOS. H. JOHNSTON,

Assistant Commissioner.

DEPARTMENT OF CROWN LANDS, (Woods and Forests Branch,) April, 1885.

Results of Fire Ranging.

The results of this action were highly satisfactory to all concerned, as appears from the annual report of the Commissioner of Crown Lands for 1885, which contains the following with regard to the first season's experience of the fire ranging system.

"Under instructions from the Department thirty-seven men were placed in the field and kept on duty between the 1st day of May and the 1st day of

October.

"The effect of their presence has been excellent. Fires were suppressed which otherwise might have become vast conflagrations, causing incalculable losses. Persons wantonly violating the provisions of the 'Fire Act' were promptly brought to justice and fined, and a general and strong interest in the direction of preventing the starting and spread of bush fires was created and kept alive.

"At the close of the season the licensees expressed their great satisfaction at the benefits resulting from the experiment, and urged its continuance

and extension.

"The total cost of the service for 1885 was \$7,911, of which sum onehalf has been refunded by the licensees, leaving the net cost of this service

to the Department to be \$3,955,50."

The system once adopted was speedily extended. In 1886, 45 men were employed as rangers, in 1887 the number was increased to 55, in addition to about 100 who were called on to give temporary assistance in fighting fire. The season was an exceptionally dry and dangerous one, so that the efficiency of the system in checking the spread of fires, which would otherwise have covered a much wider extent of territory, was thoroughly tested. The report of the Commissioner of Crown Lands for that year thus refers to the working of the system:—

"There is no doubt that the presence of the Rangers, and the prompt and active measures taken by them, materially prevented, and substantially reduced the losses—not only so but the Licensees were supplied with reliable information as to the quantity of timber damaged, its situation, and the force necessary to handle it this season before the grubs had time to seriously damage it, by which an enormous sum was saved to the Province and the

Licensees."

Cost of the Service.

The number of fire rangers employed and the cost of service has continued steadily on the increase as a larger proportion of the limit-holders have realized the benefits of the system and availed themselves of its operation. In 1891 the number of rangers on duty had increased to 98 and the total cost of the service to \$20,053. In 1896 sixty license-holders took advantage of the system, employing 160 rangers, the total expenditure being \$31,396 which included \$1,969 for fire-ranging on Crown Lands not under license,

it having been found necessary to put the system in force over a large area of Crown territory overrun with gold mining prospectors. The number of license-holders who made application to have rangers put on duty upon their limits in 1897 was 69, in which season 179 rangers were employed on timber limits, in addition to 12 detailed for service upon Crown property. During the season of 1898, 195 rangers were on duty on licensed lands, with the result that notwithstanding the long continued drought which prevailed, the losses by fire on the territory under their supervision were insignificant. Eleven fire rangers were also employed on the Crown domain, whose services proved equally effective, as no extensive fires occurred in the area thus protected.

TREE PLANTING ON HIGHWAYS.

The Ontario Legislature in 1871 passed "An Act to encourage the planting of trees upon the highways in this Province and to give a right of property in such trees to the owners of the soil adjacent to such highways" which forms the basis of the existing law on the subject. The principal clauses are as follows:

1. "For the purposes of this Act, every shade tree, shrub and sapling now gowing on either side of any highway in this Province, shall upon, from and after the passing of this Act, be deemed to be the property of the owner of the land adjacent to such highway opposite to which such tree, shrub or sapling is.

Ownership in Trees.

2. Any person owning land adjacent to any highway may plant trees, shrubs or saplings on the portion thereof contiguous to his land; but no tree, shrub or sapling so planted shall be so planted that the same may be or become a nuisance in the highway, or obstruct the fair and reasonable use of the same, every tree, shrub or sapling so planted in the highway shall for the purposes of this Act be deemed to be the property of the owner for the time being of the land whose owner planted the same."

Municipal Control.

Municipal councils were given control over the removal of trees, where it became necessary, and a penalty of \$25 was imposed for the injury or destruction of roadside trees. Power was given to municipal councils to expend money in the planting of shade and ornamental trees, or to make money grants to individuals or associations for the same purpose. It was provided that the first two sections of the Act given above should not apply to incorporated cities, towns and villages, unless the council should first pass a by-law making them applicable thereto.

Bonus for Tree Planting.

This Act was superseded by the Ontario Tree Planting Act of 1883, which, in addition to vesting the ownership of trees planted or growing on the highway in the proprietor of the adjacent land, provided for the payment out of municipal and Provincial funds of bonuses for tree-planting. It enacted that the council of any municipality might pass a by-law for paying out of municipal funds a bonus or premium not exceeding twenty-five cents for each ash, basswood, beech, birch, butternut, cedar, cherry,

chestnut, elm, hickory, maple, oak, pine, sassafras, spruce, walnut or white-wood tree planted on the highway, or on any boundary line between farms or within six feet of such boundary. The municipality was entitled to be recouped by the Provincial Treasurer to the amount of one-half the bonus paid on such trees as at the expiration of three years remained alive, healthy, and of good form, a sum of \$50,000 being appropriated by the Act and set apart as a fund for that purpose.

This measure remained in force until 1896, when it was repealed as a result of an investigation made by the Bureau of Forestry as to its operation. It was found that very few of the municipalities of the Province had availed themselves of its provisions, so that after it had been for nine years in full operation, only \$4,308.78, or less than one-tenth of the fund appropriated had been expended, and that for various reasons it had failed to commend itself to the public in most of the localities where a trial had been made. This shortcoming combined with the fact that under any circumstances, the planting of trees in isolated lines, while contributing to the beauty of the landscape, secures none of those practical advantages attained by their growth in masses as in the original forest, induced the Legislature to effect another change in the law. The measure substituted for the Act of 1883 retained and extended the principle of vesting the ownership of roadside trees in adjoining lot owners, making it applicable to all municipalities, without its adoption by special by-law being necessary in the

Provincial Bonus Abolished.

case of urban municipalities. While the Government bonus on tree planting was abolished, the municipalities were authorized to grant municipal bonuses in encouragement of tree planting, provided they saw fit to do so. The following is the full text of the Act:—

1. A person owning land adjacent to any highway, public street, lane, alley, place or square in this Province may plant trees on the portion thereof contiguous to his land, but no tree shall be so planted that the same is or may become a nuisance in the highway, or other public thoroughfare, or obstruct the fair and reasonable use of the same.

2. Any owner of a farm lot may, with the consent of the owner or owners of adjoining lands, plant trees on the boundaries of the adjoining lot.

3. Every tree so planted on such highway, street, lane, alley, place, or square, shall be deemed to be the property of the owner of the lands adjacent to such highway, street, lane, alley, place or square, and nearest to such tree, and every such tree so planted on a boundary line aforesaid shall be deemed to be the common property of the owners of the adjoining farms or lots.

4. Every growing tree, shrub or sapling whatsoever, planted or left standing on either side of a highway for the purposes of shade or ornament shall be deemed the property of the owner of the land adjacent to the highway and nearest to such tree, shrub or sapling. R. S. O., 1887, c. 201, s. 3.

3.—(1) The council of any municipality may pass a by-law for paying out of municipal funds a bonus or premium not exceeding twenty-five cents for each and every ash, basswood, beech, birch, butternut, cedar, cherry, chestnut, elm, hickory, maple, oak, pine, sassafras, spruce, walnut, or whitewood tree, which shall, under the provisions of this Act be planted within such municipality on any highway, or on any boundary line of farms as aforesaid, or within six feet of such boundary.

(2) Such by-law may further provide for the appointment of an inspector of trees so planted; for their due protection against injury and against

removal by any person or persons, including the owner, excepting as authority may be given therefor by special resolution of the council; for the conditions on which bonuses may be paid; and generally for such regulations as are authorized by subsections 20 and 20a of section 479 of The Con-

sclidated Municipal Act, 1892. R.S.O., 1889, c. 201, s. 4.

4. The inspector shall make to the council one report for each year, if required to do so, giving the names of all persons entitled to any bonus or premium under the by-law, the number of trees of each species planted, and the amount of bonus or premium to which each person is entitled, and certifying that the trees have been planted for a period of three years, and that they are alive, healthy and of good form; and upon the adoption of such report the bonuses or premiums shall be paid; provided that in no case shall the council be liable to pay a larger sum in respect of trees planted under this Act than would be payable if the same had been planted at a distance of thirty feet apart, and in no case shall a bonus be granted where the trees are less than fifteen feet apart. R.S.O. 1887, c. 201, s. 5; 53 Vic. c. 60, s. 1.

5. Where a municipality has prior to the passing of this Act passed a by-law under the authority of section 4 of The Ontario Tree Planting Act for granting bonuses for tree planting and has paid or has become liable under the said by-law for the payment of any premiums or bonuses with respect to trees planted prior to the passing of this Act, the Treasurer of the Province, out of any sum which may be voted by the Legislature for that purpose, upon receiving a copy of the inspector's report, certified by the reeve and clerk, may recoup to the treasurer of the municipality one-half of the sum paid by the municipality under the said by-law, the said report to be forwarded to the Treasurer on or before the first day of November in

each year.

6.—(1) Any person who ties or fastens any animal to or injures or destroys a tree planted and growing upon any road or highway, or upon any public street, lane, alley, place or square in this Province (or upon any boundary line of farms, if any such bonus or premium as aforesaid has been paid therefor), or suffers or permits any animal in his charge to injure or destroy, or who cuts down or removes any such tree without having first obtained permission so to do by special resolution of the council of the municipality, shall, upon conviction thereof before a justice of the peace, forfeit and pay such sum of money, not exceeding \$25 besides costs, as such justice may award, and in default of payment, the same may be levied on the goods and chattels of the person offending, or such person may be imprisoned in the common gaol of the county within which the municipality is situate, for a period not exceeding thirty days.

(2) One-half of such fine shall go to the person laying the information, and the other half to the municipality within which such tree was growing.

R.S.O., 1887, c. 210, s. 8.

7. Any person who ties or fastens any animal to, or injures or destroys any tree growing for the purposes of shade or ornament upon any boundary line between farms or lots, or who suffers or permits any animal in his charge to injure or destroy, or who cuts down or removes any such tree, without the consent of the owner or owners of such tree, shall be subject to the like penalties and liable to be proceeded against and dealt with as provided in the preceding section. R.S.O., 1887, c. 201, s. 9.

8. The council of every municipality may pass by-laws:

(1) To regulate the planting of trees upon the public highways;

(2) To prohibit the planting upon the public highways of any species of trees which they may deem unsuited for that purpose;

(3) To provide for the removal of trees which may be planted on the public highway contrary to the provisions of any such by-law. R.S.O., 1887, c. 201, s. 10.

9. The Ontario Tree Planting Act and the Act passed in the 53rd year

of Her Majesty's reign, chaptered 60, are repealed.

FOREST RESERVES.

The undue extent to which deforestation has been carried in the frontier counties of Ontario, and the prospect of the extension of similar conditions to the Northern regions, renders the problem of forest preservation one of increasing urgency. The idea that a considerable proportion of the land, including especially the non-arable tracts, should be maintained in perpetual forest, yielding its periodical harvest of timber as an essential economic factor of national prosperity, had its advocates from time to time among our public men. But the liability of the woods to destruction by fire with the advance of settlement, and the general though unfounded belief that only one crop of pine could be secured from the lands, for some time strongly militated against any comprehensive action in the direction of forest preservation. The scientific aspects of the question, however, were beginning to be studied and understood by a few people, and appreciating the growing importance of the subject and the need of popular education as to the value of maintaining a due proportion of woodland, the Ontario Government in 1883 appointed Robert W. Phipps to the position of Clerk of Forestry.

Bureau of Forestry.

As originally laid down, and for some years afterwards, the work was almost purely of an educational character, the publications issued being principally intended to rectify conditions in the cleared and cultivated portions of the province, where the remaining portions of the original forest are in private hands, and to show the need and desirability of replanting. At the same time the larger aspect of the question was not overlooked.

The office was at first attached to the Department of Agriculture, but after Mr. Phipps' death, and on the appointment of the present incumbent, a change was made in 1895 by which its scope was considerably extended. It was transferred from the Department of Agriculture to that of Crown Lands, and connected more directly with the work of administration. The Bureau of Forestry, as thus reconstituted, in place of devoting its main efforts to the dissemination of information among farmers and the formation of public opinion with respect to reforestation on private lands, has been entrusted with the preliminary investigations in connection with the forestry policy now undertaken in the management of considerable tracts of the Crown domain.

$Algonquin\ National\ Park.$

The first step in the direction of a policy of establishing permanent timber reservations was taken by the Ontario Government in 1893, in the setting apart of the Algonquin National Park. The first suggestion of the project was offered by Alexander Kirkwood of the Crown Lands Department, who, in a memo dated December 21st, 1885, addressed to the Hon. T. B. Pardee, Commissioner of Crown Lands, strongly urged the setting aside of such a reservation embracing the head waters of the Muskoka, Madawaska, Petewawa, and other streams. The matter was considered and

preliminary investigations set on foot to ascertain the suitability of the territory indicated for park purposes. Some delay was caused by the illhealth of the Commissioner, which resulted in his death in 1889. Hon. A. S. Hardy who succeeded to the position, appointed a Commission comprising Aubrey White, Assistant Commissioner of Crown Lands, Archibald Blue, Director, of Mines, Alex Kirkwood, Senior Officer of Lands Branch, Department of Crown Lands; James Dickson, Inspector of Surveys, and Robert W. Phipps, Clerk of Forestry, to enquire into the fitness of the territory under consideration for the purpose of a forest reservation and national park. The report of the Commissioners was presented to the Legislature during the session of 1893, recommending the setting apart of a compact tract of land in the district of Nipissing, south of the Mattawa River and Georgian Bay, almost a parallelogram in shape and comprising eighteen townships. An Act embodying the recommendations of the Commissioners, withdrawing this area from sale or settlement and constituting it a national park and forest reservation was adopted. The following year a considerable addition was made to the original area, bringing the total extent of the park up to 1,109,383 acres. The whole district is under timber license but as the Act setting it apart provides that only pine shall be cut, the operations of the limit-holders cannot seriously detract from its forest character.

Forestry Commission.

In June, 1897, at the instance of the Clerk of Forestry, a Royal Commission consisting of E. W. Rathbun, President of the Rathbun Company, Deseronto, lumberman; John Bertram, President of the Collins Inlet Lumber Company, Toronto, lumberman; J. B. McWilliams, Peterborough, Superintendent of Forest Rangers; Alex Kirkwood, Chief Clerk of Lands Branch, Crown Lands Department, and Thomas Southworth, Clerk of Forestry, were appointed to investigate and report on the subject of restoring and preserving the growth of white pine and other timber trees upon lands in the Province, which are not adapted for agricultural purposes or for settlement. After personally investigating considerable tracts of country and familiarizing themselves with the conditions prevailing in many lumbered over and fire swept areas of non-agricultural land they presented a preliminary report on the 10th of December, 1897, which offered the following recommendations:

1. That the present system of fire ranging inaugurated by the Government in 1886 be extended so as to be compulsory on all the holders of timber berths and that all unlicensed timber land contiguous thereto be also protected by rangers employed by the Government. That all fire rangers be subject to the inspection and control of the Department of Crown Lands.

2. That the officials of the Hudson's Bay Company be asked to co-operate with the Government in preparing and printing fire proclamations in the language of the Indians of the Northern Districts to be posted along the

canoe routes throughout the territory.

3. That for all unworked limits on which the ground rent shall be two years in default on the termination of the present license year, the license shall not be renewed, but that the berths be held by the Crown as forest reserves.

4. That the license-holders be not allowed to cut any trees for logs smaller than will measure twelve inches across the stump two feet from the ground unless under special forest conditions with the sanction and under the supervision of the district forest ranger.

5. That the Government take power by Order-in-Council to withdraw from sale or location and set aside to be kept in permanent Crown forest

reserve, such areas of territory as are generally unsuitable for settlement

and yet valuable for growing timber.

In accordance with these recommendations, the following Act enabling the Government to set apart permanent Forest Reserves, from time to time, was passed by the Legislature in 1898:—

Forest Reserves Act.

1. The Lieutenant-Governor-in-Council shall have power to set apart from time to time such portions of the public domain as may be deemed advisable for the purposes of future timber supplies, but subject to such regulations as may be adopted under the provisions of section 4 of this Act.

2. Such tracts of land so reserved shall, by proclamation in "The On-

tario Gazette," be declared to be permanent Crown Forest Reserves.

3. From and after the date of such proclamation no lands within the boundaries of such reserves shall be sold, leased or otherwise disposed of, and no person shall locate, settle upon, use or occupy such lands, or hunt, fish, shoot, trap or spear or carry or use firearms or explosives within or upon such reserves.

4. Such reserves shall be under the control and management of the Department of Crown Lands, and the Lieutenant-Governor-in-Council shall have power to frame regulations for the protection, care and management

of the said Crown Forest Reserves.

5. Such regulations shall be published for four consecutive weeks in "The Ontario Gazette" and shall immediately thereafter have the force of law as if herein enacted, and shall be laid before the Legislative Assembly

within fifteen days after its first meeting thereafter.

6. Any violation of any provisions of this Act or of any regulation made thereunder shall subject the offender, in addition to any other remedy, to a penalty of not more than fifty dollars and costs, and in default of payment thereof to imprisonment for a period of not exceeding six months, with cr without hard labor, unless the said penalty and costs (if costs are imposed) are sooner paid, and the offender shall be liable for all damages resulting from any such violation to be recovered in any court of competent jurisdiction.

7. Any prosecution for a violation of this Act or any regulation made thereunder may be had under "The Ontario Summary Convictions Act" before any justice or justices of the peace having jurisdiction where the

offence was committed.

8. This Act may be cited as "The Forest Reserves Act."

Under this legislation, the following Forest Reserves have been set apart, and an adequate staff of rangers to protect the timber has been placed in each:

Temagami	5,900	square	miles.
Mississaga	3,000	- "	66
Nepigon	7,300	"	"
Eastern	100	66	66
Sibley Township		"	"

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Year

1908

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



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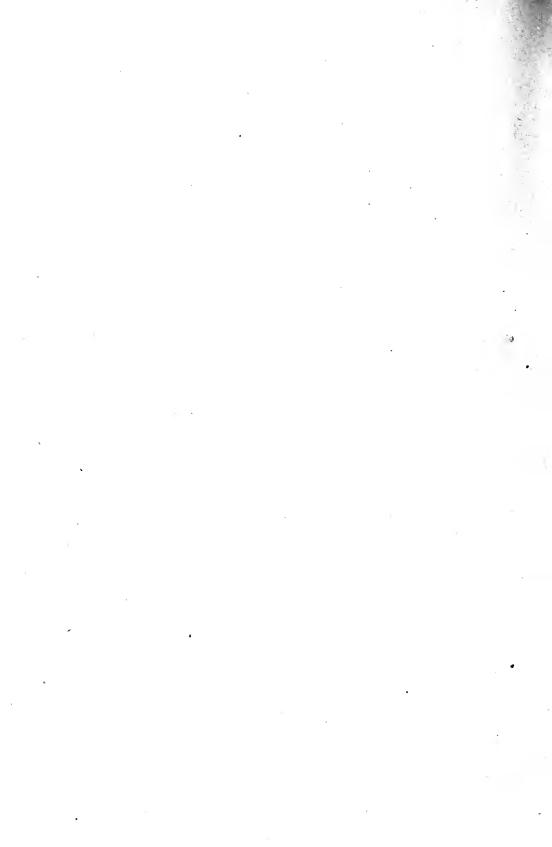
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REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

FOR THE YEAR

1908

To His Honour The Honourable J. M. Gibson, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by law, I submit for the information of your Honour and the Legislative Assembly, a report for the year ending on the 31st December, 1908, of the management of the Crown Lands of the Province.

CLERGY LANDS.

The area of Clergy lands sold during the year was 109 acres, aggregating in value \$60. The collection on account of these and former sales amounted to \$1,642.05. (See Appendix No. 3, page 6.)

COMMON SCHOOL LANDS.

The area of Common School lands sold during the year was 107 acres for \$766.80. The collection on account of these and sales of former years was \$5,890.96. (See Appendix No. 3, page 6.)

GRAMMAR SCHOOL LANDS.

The area of these lands sold during the year was 50 acres for \$40. The collection on account of these land sales in former years was \$433.65. (See Appendix No. 3, page 6.)

[v.]

UNIVERSITY LANDS.

The area of these lands sold during the year was 3,109½ acres, for \$1,594.87. The collection on account of these and sales of former years was \$1,015.78. (See Appendix No. 3, page 6.)

Crown Lands.

There have been sold for agricultural purposes during the year 74,9113 acres, for \$62,656.43. The collection on account of these and former sales was \$59,360.14. There were sold for mining purposes 7,559 acres, for

\$18,842.90, and collected on account of mining sales, \$23,445.30.

There were leased for mining purposes 4,917 acres, for \$4,877.57. There was collected on account of mining leases, \$20,611.81. There were 3,865 acres of Crown Lands leased for other than mining purposes. The collection on account of these and former leases was \$6,165.56. The total area of land disposed of during the year was 94,628 4/5 acres. The total collection on account of lands sold and leased during the year was \$118,565.25. (See Appendix No. 3, page 6.)

During the past few years settlement has flowed into what is called the "Temiskaming Region," that is the country lying north and west of Lake Temiskaming, and there are now a number of prosperous settlements through that country. Ever since the exploration of 1900 public attention has been from time to time called to what has been described as the "Clay Belt," which is an area of some sixteen millions of acres of good farming land, reported by the exploration parties as lying on the Hudson Bay slope. Owing to the distance of this land from the settled parts of the Province and want of communication, no settlement had gone in there, and by some even the existence of this large area of good land was regarded as mythical. Department, in order to satisfy itself as to the character of the country, has been running base and meridian lines through the "Clay Belt" region, and the result of these surveys having demonstrated that the land is as good as reported, the Department has surveyed one hundred and twenty townships. containing 2,625,000 acres, in what is known as the "Clay Belt." In addition to subdividing these townships, it has by survey blocked out in nine mile townships one and a half millons of acres additional. These surveys were made so that the country might be opened for settlement promptly, as soon as circumstances warranted that action. The reports of the surveyors who ran the base and meridian lines and blocked out the townships, shows the land in that region to be even better in quality than the reports of the explorers led us to expect.

For some years the Temiskaming & Northern Ontario Railway has been extending in the direction of this "Belt" with the ultimate idea of tapping it in a few years. The immediate construction of the Transcontinental Railway, which it was found would traverse the "Clay Belt" from east to west, a distance of some four hundred miles, and which gave assurance of great development and enormous traffic, caused the immediate construction of the Temiskaming and Northern Ontario Railway to become a necessity, so that settlement might flow in from the older parts of the Province, and that the population of that region should have easy communication with the Seat of Government of Ontario. So much energy was displayed by the Temiskaming and Northern Ontario Railway Commission that last autumn the Province's railway was constructed to the town of Cochrane, which is its junction point with the Transcontinental. The Railway Commission also

laid out a townsite at the junction point, and offered lots for sale many lots were purchased by parties for business purposes, and it is expected that a town of considerable importance will immediately spring up there. The building of the Temiskaming & Northern Ontario Railway, the construction of the Transcontinental and the creation of a townplot there, caused population to flow in, and it became necessary to provide for those who desired to settle. This was done by opening a number of townships along side the lines of the Temiskaming & Northern Ontario Railway and the Transcontinental, and the establishment of Crown Lands Agencies at the towns of Matheson and Cochrane. The nucleus of a strong settlement has already been formed at Cochrane, and with the large population that will flow in for railway construction purposes good markets will be created for everything that can be grown, and the success of those who engage in farming pursuits there would seem to be assured. When the whole "Clay Belt" is opened from east to west by the construction of the Transcontinental and other railways, there is every reason to believe that that region will become one of the best agricultural regions of the Province. The townships open for sale in that locality now are Lamarche, Brower, Clute, and Glackmeyer, which are attached to the Cochrane Agency, and the townships of Bowman, Hislop, Benoit and Walker, which are attached to the Matheson Agency. Other townships will be added to these Agencies from time to time as necessity arises.

FREE GRANTS.

The following townships were added to the Free Grant list during the past year: Airy and Murchison, in the District of Nipissing; Mutrie, in the Rainy River District; Burns, in the County of Renfrew; Capreol, in the District of Sudbury, and Aberdeen, Galbraith and Lefroy in the District of Algoma. 2,110 persons were located for 297,543 acres of land, and 384 people purchased 14,480 acres under the Free Grant Regulations. patents were issued for locations on which the settlement duties had been completed. The number of locations is the largest in the history of the Department since Confederation, except one year when there were five more locations only than have been made this year. There are now 231 townships on the Free Grant list. The Department has been endeavoring to see that only land suitable for farming purposes is sold or located. It has established a system of inspection of all lots applied for, so as to be satisfied that there is a sufficient proportion of good land to warrant the belief that the lots are being taken for farming purposes. Under the legislation of last Session, inspections have been made as applied for, and, if the circumstances warranted it, the minerals have been released, and also small quantities of pine timber, where the lands were not covered by timber license.

MILITARY GRANTS.

Four hundred and eight Military Certificates were issued during the vear. This brings the total number of certificates granted under 1 Ed. VII., Cap. 6, to 13,958. Location certificates issued previous to this year were confirmed to the extent of 350. Altogether, 1,100 new locations were made during the year, bringing the number of locations under the Act up to 6.845. 625 Military Certificates have been surrendered to the Crown for the \$50 each commutation money, making a total of 3,050 disposed of in this way. Patents have been issued for 700 military grants, making a total of 2,005 patents issued to date. Where military grants have been taken subject to

settlement duties, it has been considered proper to call upon the locatees to file evidence showing that they are in actual occupation and the nature of the duties they have performed.

MINING INDUSTRY.

There was much activity in the raising of ores and minerals in Ontario in 1908, and the total value of the output of mines and mineral works was again the largest yet recorded. The aggregate production amounted to \$25,616,795, as compared with \$25,019,373 in 1907. Silver and nickel were the principal items in the list of metals, the yield of the former being 19,401,021 ounces,—practically all from the mines of the Cobalt camp—and of the latter, 10,175 tons, by far the larger proportion of which came from the deposits of the Sudbury region. The low prices which prevailed throughout the year depressed the value of the silver production, which was returned at \$9,116,008. It may be pointed out that Ontario now occupies a leading place among the silver-producing countries of the world, having contributed about one-ninth of the entire reported production in 1908. There was raised and shipped from the mines of Cobalt last year 24,453 tons of ore (including concentrates), which was considerably more than the total production up to the end of 1907. The average contents of the shipments for 1908 was 793 ounces of silver per ton, compared with 806 ounces up to 31st December, 1907. The principal producing mines were largely the same as before, viz.: Nipissing, La Rose, O'Brien, Kerr Lake, Coniagas, Temiskaming and Hudson Bav. Temiscamingue, Buffalo, Tretheway Drummond, McKinley-Darragh-Savage, Cobalt Silver Queen, City of Cobalt, Standard Cobalt, Right of Way, Silver Leaf. The Crown Reserve mine, situated in the bed of Kerr Lake, began production in 1908, and was a heavy shipper of rich ore. A considerable proportion of the ore produced at Cobalt, especially of the richer grades, is now treated in the Province, in refineries situated at Copper Cliff, Deloro, Thorold and Trout Lake.

Development work was carried on in the silver districts of South Lorrain, James Township, Elk Lake and elsewhere in the Montreal River region, but owing largely to the greater distance of these camps from transportation facilities as compared with Cobalt, progress is at a slower rate. The latest discoveries of silver were on the west shore of Lake Gowganda, where some rich finds were made during the year, and where there will undoubtedly be much development in 1909. Exploration has been pushed on into the

country adjoining Welcome, Burwash and Shining Tree Lakes.

The production of nickel in 1908 was valued at \$1,866,059, and of copper \$1,071,140, the bulk of these metals being contained in the matter made in the furnaces of the Canadian Copper Company and the Mond Nickel Company. The iron mines of Ontario yielded 216,177 tons of ore last year, worth \$574,839, and there was made at the blast furnaces 271,656 tons of pig iron, valued at \$4,390,839.

The mining industry is dealt with more fully in the Eighteenth Report

of the Bureau of Mines.

COLLECTIONS.

The total collections of the Department from all sources was \$2,430,-429.39. Of this amount \$23,445.30 was derived from mining lands; \$218,071.96 from royalties; \$1,786,338.99 from woods and forests; \$125,078.06 from supplementary revenue; \$71,721.39 from mining licenses, and \$66,008.71 from recording fees. (See Appendix No. 4, page 7.)

DISBURSEMENTS.

The gross expenditure of the Department for all services during the year was \$637,293.30. The principal services were: Agents' salaries and disbursements, \$48,942.24; forest ranging, \$53,823.28; fire ranging, \$119,734.26; forest reserves, \$46,970.97; mines and mining \$21,375.12; exploration and investigations, \$14,924.24; mining recorders, \$8,349.21; surveys, \$146,370.92; veterans' commutation, \$29,995.83; provincial mines, \$30,648.16; refunds, \$19,145.89; parks, \$17,113.89; contingencies \$42,230.99. (See Appendix Nos. 6 and 7, pages 9 to 44.)

WOODS AND FORESTS.

The total revenue from woods and forests was \$1,786,338.99, consisting of bonus, \$100,879.39; timber dues, \$1,618,242.58; ground rent, \$65,150.87, transfer fees, \$2,066.15. (See Appendix No. 4, page 7.)

The revenue from timber dues was the largest in the history of the Province. Of this amount, however, \$496,000 accrued during 1907, but owing to financial stringency, payment was not enforced during that year. The collections proper for 1908 were \$1,224,243, and we carried forward into 1909 \$235,368, owing to inability of lumbermen to pay. In the history of the Department it has never been the practice to insist upon payments being made if the parties were shown to be in circumstances where the enforcement would ruin them. They were extended every leniency if the security was sufficient, interest at the rate of six per cent. per annum being charged on all balances unpaid at the end of the year. The situation of the lumber trade has slowly improved during the past year, and the recent stringency would seem to be passing away. One effect of the stringency of last year has been the curtailment of the output of the present winter, as from reports received the output of this year will be very much below that of last.

FIRE RANGING.

The fire ranging system at present in operation in Ontario was organized in 1885. Prior to that, though the Act to preserve the forest from destruction by fire was on the Statute Book, very few people knew anything about it, as those who travel in the forest are not usually in possession of the Statutes of Ontario. In the year 1885 it was thought that if a number of men of good judgment were placed on duty during the summer months as fire rangers they would be useful in bringing a knowledge of the law to all who travel in the forest, and in other ways bring about a better state of affairs than then existed, and so the present system of fire ranging was inaugurated in that year.

In establishing the system, the first consideration was the selection of the men, as unless all-round, good men were obtained, the system would certainly prove a failure. The timber licensees, having a large interest in the preservation of the timber on their licensed limits, it was laid down as a sine qua non that they should pay one-half of the wages and expenses of the men who might be selected, and as they had in their employment men who were familiar with their limits, knew the danger points and the class of people resident upon or frequenting them, it was thought it would be wisdom to let the licensees select the men for their own limits, thus making them responsible for the character of the men they selected, and for keeping more or less surveillance of them while they were in the field. In order to clothe them

with authority under the law, the Department appointed these rangers "Bush and Fire Rangers," the Statute providing that such officers should be ex-officio officers to enforce the provisions of the "Act to Preserve the Forest from destruction by Fire."

The rangers were instructed by the Department as to how they were to perform their duties. They were also supplied with diaries in which they had to enter their movements from day to day, and anything of importance occurring on the territory under their charge. They were supplied with large poster copies of the Fire Act printed on linen, which they had to post up on roads, portages and other places where there was travel passing. They were also supplied with small pamphlet copies of the Act, which they were instructed to hand to all parties or persons with whom they came in contact, such as surveyors, foremen of river drives, prospectors, explorers, hunters, summer tourists, etc., etc. By these means, it was thought that a knowledge of the law would become general, and that it would cease to be the dead letter it had been from its passage through Legislature. The rangers were instructed to take the names and addresses of all those with whom they came in contact, and in addition to handing them a copy of the Act, to impress upon them the necessity for being careful in the use of fire, and its extinguishment, when it had served its purposes, particularly when they were moving camp, or cocking meals en route. They were cautioned to be conciliatory in their manner and not to be over-bearing or abusive to settlers or others, it being recognized that a great deal could be done by moral sussion. and the enlistment of the sympathy and good-will of those using fire in travelling through the forest. In addition to the foregoing, instructions were given them as to the course to pursue in the event of a fire breaking out, by which they were required to report at once to the licensee and the Department the extent of the damage done, the locality in which the fire occurred, the expenditure in extinguishing it, and the nature and quantity of the timber damaged, so that steps might be taken to lumber it before it became a loss.

The system was started in 1885 as an experiment with few men and a small appropriation; it worked so well that immediately, with few exceptions, the licensees all took advantage of it, and so the territory under license was guarded in the summer time. At the end of the season, each ranger had to report the fires which had occurred on the territory, the locality in which they took place, the cause thereof, if it could be ascertained, and the loss of timber which ensued. The timber licensees were asked to report on the service; if in their opinion it had been efficient or had served its object, and where they thought it weak, and they were also invited to suggest how it might be strengthened and made more effective. The system has been in operation for nearly twenty-five years in the Province of Ontario. From time to time improvements have been made, and it has been strengthened at various points. It is not too much to say that it has been successful, and has met the approval of those most interested and most familiar with One of the improvements has been, that power was taken to appoint fire rangers on lands where the licensee had failed to do so, charging the expense of same against the licensee. This action was taken because it was not considered fair that the man who paid for rangers on his own territory to protect it, should be exposed to the danger from fire running in from an adjoining limit, the owner of which was either too parsimonious or too careless to put on the necessary rangers. Then it was thought that it would be well to get a closer grasp of the work as performed in the field, and the licensed territory was accordingly divided into districts and a supervising

fire ranger appointed over each, whose duty it was to visit every fire ranger as often as possible for the purpose of seeing that he was performing his duty effectively and not engaged in any other work except fire ranging. The Department is always pleased to receive suggestions as to the improvement of this service, and to give consideration to whatever appears desirable for that purpose. The only recent suggestions of any importance have been that the number of men should be increased, and that their pay should be added to. The Department considers that the territory is pretty well guarded now, except perhaps in a few dangerous localities, as to which special action can be taken, and as to the increased remuneration, the Department feels that it should be undertaken by the parties receiving the largest proportion of benefit from the service, that is the timber licensees.

Later on, when settlement had extended further back and railway construction had assumed larger proportions and the discoveries of minerals had sent an army of prospectors into the forest, it became expedient to appoint fire rangers on the unsold territory of the Crown. The railways we found were the cause of great losses of timber by fire. In some instances, the survey parties were careless and allowed fires to remain unextinguished when moving, which spread and did serious damage. Then the disregard of the Fire Act as to the proper appliance to be fixed to locomotives created an additional danger. The Department tried the experiment of putting rangers along a line of railway, which was under construction through a densely timbered region, and became satisfied by that experiment that fires need not occur in railway construction if proper care was exercised. legislation was obtained which enabled the Department to put rangers along lines of railway through the back country wherever it deemed the same were necessary, and to make the railway company pay the cost of the protection. Even in districts where construction was completed and the railway was running through a densely timbered region, the Department took the precaution of placing rangers, supplying them with railway velocipedes so that they could follow the trains from one section to another and so on, so that if a fire started from sparks or the dropping of coals by the locomotive, it might be put out before it assumed large proportions.

Of course, forest fires have occurred in spite of all the care and efforts we have made to prevent them. It is impossible to watch every one of the thousands of people who are wandering through the forest during the dry period, many of them reckless and careless as to the danger of leaving fires burning when they move camp, etc., etc. The ideal state would be to keep every body out of the forest, allowing no burning by settlers for clearing land during the summer months, etc., and that is what some people think should be done. Practically, this cannot be done; in the very nature of things, it would stop the clearing up of the lands for farming, create bad feeling and lead to the setting out of fires with malice, which can be easily done without discovery in an immense forest area. The ideal state being unattainable, practical efforts have been made to improve the situation, and the belief of the Department is that a sound public opinion has been created upon this question among the denizens of the forests, that consequently forest fires are neither so frequent nor so disastrous as they used to be, and that the situation is yearly improving. As before said, the system has never been regarded as perfect, and we are consequently frequently inquiring of those experienced in such matters as to suggestions whereby the system can be made more effective. Last year we had some serious fires, but no great losses took place; where the timber was damaged we were able to offer it for sale before it became a loss. The reports we have received from timber

licensees do not show any serious loss on licensed lands, and where the damage has occurred, they too, having prompt reports from the fire rangers, were able to arrange to cut the damaged timber before it went to waste.

On licensed territory we had last year 376 men, at a cost of \$46,621.45; on railways, 147 men, at a cost of \$53,236.71; on lands of the Crown, 58 rangers, at a cost of \$17,398.52. Then, the licensees paid an equal amount to ours for rangers on licensed lands, viz.; \$46,621.45. On Forest Reserves we had 111 men, costing \$45,805.18, so that there were on duty as fire rangers in the forest during the summer months, 692 men, at a cost of \$209,682.29.

PARKS AND RESERVES.

In recent years the desire of the Department has been to separate areas valuable for their pine timber into forest reserves and close them against settlement, etc. We have also created one or two parks, partly for this, and

partly for other reasons.

The first park established in the Province was the Algonquin Park. At the time it was established, the territory covered by it was all under timber license, part of it for the cutting of all kinds of timber and part of it for the cutting of pine timber only. A careful inspection was made of this territory, and finding it was unsuitable for agricultural purposes, contained a network of rivers and lakes, covered the head waters of seven or eight important streams, it was felt that it would be a public benefit to withdraw it from settlement, put a staff of rangers in it in order to protect it from trespass and fire, as well as to preserve the game, and as far as possible keep it in a state of nature. This park is to-day one of the most beautiful parks to be found anywhere, containing miles of beautiful lakes and rivers, on which the lover of the forest may roam through what has been well called a "Lacustrine Paradise." The game has been preserved, indeed the forest is alive with game, moose being plentiful, and that most interesting of all Canadian wild animals, the beaver, is to be found surrounded by his family, as industrious in hydraulics as he ever was. If the people of this Province generally knew what a marvellously lovely spot this park is, and so easy of access, they would certainly take advantage of the opportunity of spending their summer holidays in this quiet locality, surrounded by a typical Canadian forest. In this park we have a chief ranger with a staff of rangers under him to prevent fire and trespass, enforce the game and fishery laws and cut out portage roads from one lake to the other. These rangers are always courteous and obliging to visitors and endeavor to give them all information, which shall enable them to visit different parts of the park. area of this park is 1,216,000 acres.

Rondeau Park: This is a small park containing about 5,000 acres. It is situated in one of the garden counties of Ontario, the County of Kent, on the shores of Lake Erie. Here is to be found specimens of all the ancient forest trees of Ontario, which it is almost impossible to find in any other locality. It is a favourable resort for picnic parties from the surrounding neighborhood, and is an ideal spot for such outings. There is a Superintendent in charge, and small lots are leased at a moderate rental by the

Department for cottage sites.

The Temagami Forest Reserve, the most important in the Province, contains a large quantity of pine timber, which has been estimated at from three to four billions of feet. The pine timber is of good quality, and easily lumbered, part of it can be driven down to Ottawa City, and also to the Georgian Bay of Lake Huron. It is being blocked out by surveys, and the quantity

of timber on these blocks is being estimated from year to year for the purpose of ascertaining with closeness the actual quantity of timber there is in the reserve. There is a chief ranger in charge of this reserve, who had under him last year a staff of seventy rangers, at a cost of \$30,000. There were no serious fires in the reserve although in the vicinity of Gowganda Lake, there was a fire that did some damage. The quantity of timber was estimated and offered for sale and was sold for \$18 a thousand bonus, in addition to the Crown dues of \$2. This reserve has been carefully protected, but it is the subject of a good deal of anxiety just now. The pine timber is growing on the surface, and beneath it there are silver mines. Thousands of prospectors have gone in there, which will render a large increase in the ranging staff necessary. The area of this reserve is 3,563,600 acres.

The Nepigon Reserve has an area of 4,670, 080 acres. There is a considerable body of pine in this reserve, but it was to protect the spruce and pulpwood growing on this area and to preserve the game and fish that it was primarily set apart. Here there is a chief ranger with a staff under him. Owing to the construction of the Transcontinental Railway, there is a continual stream of travel through this reserve, as the line of construction runs through the north end of it. There have been some fires during the year, but none have done any serious damage. Twenty-two rangers were on duty

there last year at a cost of about \$9,000.

Thunder Cape Reserve is a small reserve, eighty miles in extent, which was set apart to protect the timber on the promontory called Thunder Cape. The Crown Timber Agent at Port Arthur is in charge of this reserve.

The Mississaga Reserve is situated on the tributary to the Mississaga River, which flows into the Georgian Bay of Lake Huron. This reserve contains 1,920,000 acres. The quantity of pine timber on this reserve is estimated at from three to four billions of feet. There is no settlement or mining in this vicinity, and therefore it is reasonably safe from fire. The Department is also blocking this reserve out by survey and estimating the blocks so as to get an accurate idea of the quantity of pine timber in it. We had a supervising ranger and staff of twenty-two rangers under him on duty in this reserve last year at a cost of about \$7,600.

There is a large block of timber lying on the Quetico River, in the Rainy River District, which it is under contemplation to create into a forest reserve. The estimated quantity of timber on this area is about one and a half

billions of feet.

CULLERS' EXAMINATIONS.

Cullers' examinations were held at North Bay, Kenora, Arnprior and Sprague. 47 candidates were successful at these examinations and were granted certificates authorizing them to act as Cullers. (For list of Cullers see Appendix No. 45, page 119.)

CROWN SURVEYS.

The following Crown surveys have been undertaken this year:—
Instructions for subdivision of thirteen townships were issued. The
names of these townships and the respective districts in which they are
situate are as follows:—

District of Nipissing:—Part of Maisonville and Benoit, townships of Skead, Bonis, Berry, Steele. District of Sudbury:—Townships of Haggart and Kingsmill. District of Algoma:—townships of Fleck and Sankey. District of Thunder Bay:—township of Fraleigh. District of Rainy River:—townships of Morson and Umbach.

Instructions also issued for a number of base and meridian lines which were run out during the year. In the Mississaga Forest Reserve, District of Algoma, 319 miles were run. In the Temagami Forest Reserve, in the District of Nipissing, 140 miles were run. In the District of Algoma and Thunder Bay, 153 miles were run. In the District of Sudbury, 27 miles were run.

The outlines of Block No. 7, in the Thunder Bay and Rainy River Districts, set apart in accordance with the provisions of Statutes of Ontario, 4 Edward VII., Chapter 18, along the Thunder Bay Branch of the Grand Trunk Pacific Railway, was also defined upon the ground, 48 miles having been run.

The Gillies Timber Limit, in the District of Nipissing, was also sub-

divided into blocks of the normal area of 640 acres each.

A number of timber berths in the Districts of Algoma, Nipissing, Rainy River, have been surveyed during the year.

The town sites of Brower, Smyth and addition to Smyth, both in the District of Nipissing, have also been surveyed.

Several other minor surveys have been performed.

The reports of the surveyors of the base and meridian lines in the Clay Belt in Northern Ontario confirm the favorable impression of former reports as to the adaptability and fertility of the soil for agricultural purposes.

The surveyors' reports so far as received and examined will be found

in Appendices 18 to 42 inclusive, pages 61 to 113, inclusive.

MUNICIPAL SURVEYS.

On the petitions of the municipal councils of the City of Port Arthur, County of Waterloo, County of Wellington, Township of Barton, Township of East Oxford, Township of Ross, Township of Houghton, United Counties of Stormont, Dundas and Glengarry, Township of East Luther, instructions have issued to survey certain streets in the City of Port Arthur, to survey part of the line between the Township of Waterloo and the Township of Guelph, to survey the original allowance for road between broken front and 1st concession of Barton, to survey a portion of road allowances between the 3rd and 4th concessions of the Township of East Oxford, to survey a portion of the road allowance between the 7th and 8th concessions in the Township of Ross, to survey the road allowance between lots 7 and 8 east of the North Road, Township of Houghton, to survey the boundary road allowance between the Townships of Osnabruck and Cornwall, to survey certain lots in the 14th concession of the Township of East Luther.

The following municipal surveys have been confirmed under the provisions of the Revised Statutes of Ontario, 1897, Chapter 181, sections 14 and 15, such surveys being final and conclusive. The allowance for road forming the boundary between the Townships of Osgoode and Mountain. Certain block of land in the Town of Blind River, District of Algoma. Certain line in the Township of Hinchinbrooke, in the County of Frontenac.

Particulars relating to these surveys will be found in Appendices No. 14 and 15, pages 54 to 56, inclusive.

MINING AND OTHER SURVEYS.

The Mining Act of Ontario requires that applicants to purchase or lease mining lands in unsurveyed territory shall file in the Department, surveyor's plans (in triplicate) of their proposed mining claims with field notes and description by metes and bounds, before any sale or lease can be carried out, and under Orders-in-Council, dated February 26th, 1906, 2nd October, 1907, 7th November, 1907 applicants to purchase islands, or locations for pleasure and summer resorts or for agricultural purposes in unsurveyed territory, are required to file surveyor's plans (in triplicate) of their islands or locations as the case may be, with field notes and descriptions by metes and bounds, together with the necessary affidavits as to there being no adverse claim by occupation or improvement, etc.

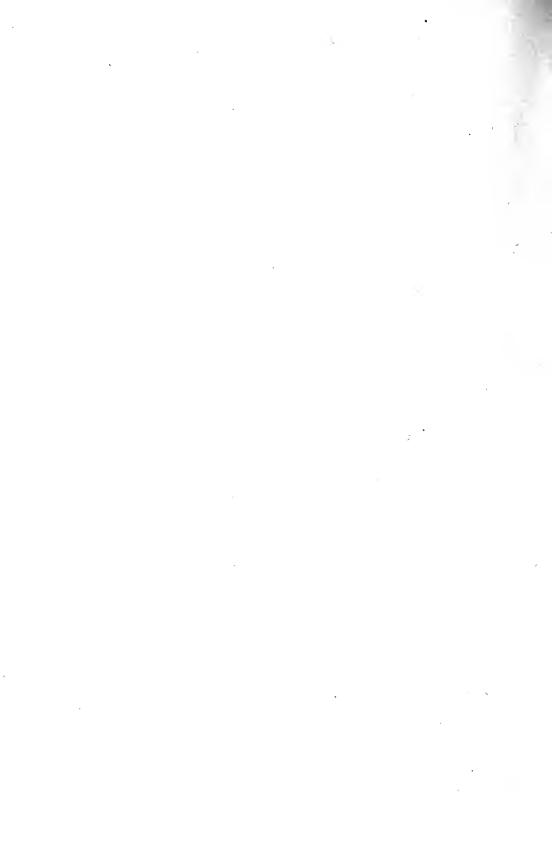
Under the above Act, Orders-in-Council and Regulations in the Districts of Parry Sound, Nipissing, Sudbury, Algoma, Thunder Bay, Rainy River, an area of 10,708.98 acres has been sold and patented during the year for which the sum of \$38,077.89 has been received, and an area of 4044 acres

has been leased at \$1 per acre for the first year's rental.

F. Cochrane,

Minister.

Department of Lands, Forests and Mines, Toronto, December 31st, 1908.



APPENDICES.

Appendix No. 1.

Return of Officere and Clerks of the Department of Lands, Forests and Mines for the year 1908.

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	Remarks			-	1
r 1908.					
for the year	Salary per annum	\$ c. 6,000 00. 3,750 00. 2,500 00. 1,800 00. 1,600 00. 550 00. 550 00. 550 00.	2,000 00 1,400 00 1,050 00 1,100 00 650 00 850 00 550 00	1,650 00 850 00 550 00	24,450 21,100 1,150 1,000 1,000 1,000 800 800 1,00
s, Forests and Mines	When appointed	1905, May 13 1872, Fab. 1 1879, Feb. 26 1889, May 1 1905, Jan. 1	1872, May 1 1903, Mar. 6 1894, Feb. 5 1908, Jan. 1 1896, Oct. 23 1906, July 1 1906, Oct. 9	1900, Mar. 2 1904, Jan. 13 1904, Nov. 9	1866, Jan. 30. 1892, Sept. 1. 1872, Feb. 5. 1897, Sept. 27. 1904, Oct. 19. 1897, Jan. 15. 1904, Nov. 23. 1906, April 21. 1906, May 15. 1890, May 15. 1890, April 9. 1902, Jan. 13.
Return of Officere and Clerks of the Department of Lands, Forests and Mines for the year 1908.	Designation	Minister Deptuty Minister Law Clerk Minister's Secretary Secretary to Department Stenographer do	Chief Clerk do Stenographer Clerk do Stenographer Stenographer	Chief Clerk	Director of Surveys Surveyor and Draughtsman Clerk Draughtsman Clerk Oranghtsman Stenographer Draughtsman Go do do do do do
RETURN of Officere and Cl	Name	Hon. F. Cochrane. Aubrey White. George Kennedy Geo. W. Yates. E. S. Williamson. Janet Garvie. M. M. McCrea.	J. J. Murphy Walter Cain. W. R. Ledger Selby Draper. May Bengough. S. A. Platt J. Oram.	R. H. Browne R. T. Winter. E. F. O'Neil	Geo. B. Kirkpatrick J. F. Whitson. W. F. Lewis. D. G. Boyd. E. M. Jarvis. J. B. Proctor H. Treeby. M. H. Kirkland J. H. Patterson J. H. Patterson C. S. Jones. C. E. Burns W. S. Sutherland W. Carrell.
	Branch		Sales and Free Grants	Military Grants	Surveys and Patents
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		·
2,7,256 1,1,250 1,1,250 1,1,500 1,000 1	2,100 00 1,200 00 1,150 00 1,000 00 850 00 1,500 00 1,500 00	3,000 00 850 00 1,000 00 850 00 850 00 850 00 850 00 850 00
1887, Dec. 1 1891, Nov. 1 1898, Aug. 1 1908, April 9 1903, Jan. 1 1904, Nov. 23 1905, Oct. 2 1906, Aug. 23 1906, Aug. 23 1906, Aug. 23 1906, Oct. 2	1861, April 15 1873, Dec. 20 1904, Jan. 13 1905, Oct. 2 1905, Oct. 2 1905, Oct. 2 1880, Mar. 1	1891, June 19 1906, Jan. 1 1906, Jan. 1 1906, Oct. 2 1906, Feb. 27 1907, Jan. 29 1907, Sept. 24 1906, July 24
Chief Clerk Clerk do	Accountant. Clerk do do do do do Registrar Clerk	Deputy Minister Clerk do Stenographer Clerk do do Clerk do Stenographer Messenger
J. A. G. Crozier Kenneth Miller L. B. Cook H. Gillard F. J. Niven W. F. Trivett R. H. Hodgson Jno. Houser Chester Dies A. J. Lamb Florence Lennon	D. George Ross E. Leigh H. M. Lount. H. E. Johnston H. G. Harris C. J. Clark Frank Yeigh. H. Cartwright.	Thos W. Gibson Anne Moffatt. W. H. Morris Ethel Craig. R. D. Fisher. R. A. Sinclair D. H. Barr. W. Lemoine. A. Burritt. H. Brophy.
Woods and Forests	A ecounts	Bureau of Mines

D. GEO. ROSS, Accountant.

AUBREY WHITE, Deputy Minister Lands and Forests.

Appendix No. 2.

List of Land Agents and Homestead Inspectors for the year 1908.

Remarks.	Died Dec. 31, 1908. Resigned March 31, 1908. Resigned July 29, 1908. Resigned July 20, 1908. Resigned Nov. 22, 1908.	<i>*</i>
Salary per annom.	1,280 00 00 00 00 00 00 00 00 00 00 00 00 0	
Date of appointment.		1907, Sept. 30
District or county.	f Hastings and Peterboro Stead Inspector Frontenac and Addington stead Inspector and Crown Land District of Sudbury do Algoma stead Inspector f District of Rainy River f District of Rainy River f District of Napissing County of Peterboro District of Nipissing Fronteniskaming, District of Nipissing Fread Inspector Fremiskaming, District of Nipissing of District of Parry Sound plot of Alberta and part of Di my River niny River of O do Parry Sound do Parry Sound do Rainy River do Sudbury do Sudbury do Sudbury do Rainy River do Rainy River do Rainy River	do do Nipissing ob ob
Post office address.	Tory Hill Minden Fort Frances Kenora Kenora Bracebridge Bracebridge Massey Thessalon Parry Sound Starton Station Cochrane Mattawa Apsley Maganetawan New Liskeard Chelmsford Emsdale Fort Frances Fort William Mattawa Fort Arthur Blezard Valley Sudbury Emorate Mattawa Maguneta wan New Liskeard Chelmsford Emsdale Fort Arthur Blezard Valley Sudbury Emorate Morth Bay	Sturgeon Falls
Name .	Anderson, Jno. H. Baker, R. H. Barr, James Belyea, C. W. Both, Chas. Brown, James B. Brown, James B. Buchanan, Thos. Buchanan, Thos. Campbell, Wm. Campbell, Thos. Chester, Thos. Deacon, John M. Eastland, T. G. Freeborn, Dr. J. S. Grills, John J. Groulx, R. J. Hunt, J. McK. Hughes, Thos. Jenki, Williams. Jenks, James Jenks, James Jenks, James Jenks, James Jenki, Wm. Keefer, Harold A. Lemieux, J. A. McFayden, Alex Parseos, Thos. J.	Fullon, Jas. A

\$500 00 \$500 00 \$500 00 \$500 00 \$500 00 \$500 00 \$500 00 \$500 00 \$500 00	_
1907, May 31 1905, July 12 1906, May 7 1906, May 7 1880, June 17 1869, May 28 1905, May 31 1905, July 14 1905, July 14 1905, April 7 1905, May 10	-
Part of District of Parry Sound do Renfrew. do District of Rainy River. Homestead Inspector. Part of District of Parry Sound do Hastings. do Peterboro do Renfrew. do Bistrict of Sudbury do St. Joseph Island Assistant Homestead Inspector. Part of District of Nipissing. do do Algoma	_
Parry Sound. Wilno. Dryden. Sturgeon Falls. Powassan. L'Amable. Kinmount Pembroke. Warren. Marksville. Engelhart Engelhart Engelhart Engelhart Engelhart	
Powell, Fred. R. Vilno. Prince, Adam. Prince, Adam. Pronger, R. H. Bryden. Quenneville, Isadore. Sturgeon Falls. Scarlett, J. S. Powassan Tait. J. R. Kinnount. Warren, D. B. Kinnount. Warren, D. B. Warren. Wright, E. A. Marksville. Whybourne, W. E. Marksville. Woollings, Jos. Engelhart. Woollings, Jos. Engelhart. Young, H. N. Sault Ste. Marie	

AUBREY WHITE,
Deputy Minister Lands and Forests.

D. GEO. ROSS, Accountant.

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections for the year 1908.

Service	Acres sold and leased	Amount of sales and leases	Collections on sales and leases	
:		8 c.	\$ c.	
Crown Lands:			•	
Agricultural	$74,911rac{3}{4}$	62,656 43	59,360 14	
Mining	7,559	18,842 90	23,445 30	
Clergy Lands	109	60 00	1,642 05	
Common School Lands	107	766 80	5,890 96	
Grammar do do	50	40 00	433 65	
University Lands	$3,109\frac{1}{2}$	1,594 87	1,015 78	
Leases:				
Mining	$4,917 \tfrac{8 \cdot 2}{1 \cdot 0 \cdot 0}$	4,877 57	20,611 81	
Crown	$3,864\frac{73}{100}$	311 50	6,165 56	
	94,6284	89,150 07	118,565 25	

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister Lands and Forests.

Appendix No. 4.

Statement of the Revenue of the Department of Lands, Forests and Mines for the year 1908.

Service	\$	c.	\$	c.	\$	c.
LAND COLLECTIONS.					According to the state of the s	-
Crown Lands: Agricultural Mining	59,360 23,445		00.00	- 44		
Clergy Lands	1,642 5,890 433 1,015	96 65	82,808	9 44		
Rent: Mining Leases	20,611 6,165	81	8,982	2 44	,	
Mining Licenses	71,721 66,008	39	26,777	7 37		
RoyaltiesProvincial Mines	218,071 12,592	96	137,730	10		
Supplementary Revenue: Acreage Tax	9,502 100,538 15,037	47 57	230,664			
Woods and Forests.			125,078		612,038	2
Timber Dues			100,879 $1,618,242$ $65,150$ $2,065$	2 58 9 87		
Provincial Assay Fees	362 778 384	72	1,525	39	1,786,338	9
Rondeau Park	335 581 1,181	90	2,098			
Refunds.		•	2,000	- 52	3,624	2
Temagami Timber Cutting. Fire Ranging. Surveys. Wood Ranging. Agents Salaries.			16,177 121 311 244	63 00 54 87		
Explorations and Investigations			104	24 50 00	28,427	8
					-,	_

D. GEO. ROSS,
Accountant.

AUBREY WHITE, Deputy Minister Lands and Forests.

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year 1908, which are considered as Special Funds.

Service.	\$ c.	\$ c.
Clergy Lands. Principal	702 73 939 32	1,642 05
Common School Lands. Principal	2,488 50 3,402 46	5,890 96
Grammar School Lands. Principal	255 00 178 65	433 65
University Lands. Principal	875 25 140 53	1,015 78 8,982 44

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister Lands and Forests.

Appendix No. 6.

STATEMENT of Disbursements of the Department of Land, Forests and Mines for the year 1908.

Service.	\$ c.	\$ c.	\$ c.
Agents' Salaries.			
Land.			
Anderson, John H Baker, R. H. Belyea, C. W. Both, Chas Brown, J. B. Buchanan, Thos Byers, R. J. Campbell, Wm. Deacon, J. M.			
Eastland, T. G. Freeborn, Dr. J. S. Grills, J. J. Handy, E. Hollands, C. J. Hugh, Williams. Jenks, J. Jenkin, Wm.	300 00 500 00 500 00 301 29 300 00 447 60 375 00 198 71		
Keefer, Harold A. Lemieux, J. A. McFayden, Alex. MacLennan, J. K. Parsons, W. J. Philion, J. A. Powell, Fred R. Prince, Adam.	500 00 200 00 300 00 500 00 363 79 500 00 500 00		
Pronger, R. H. Scarlett, J. S. Tait; J. R. Warren, D. B. Whybourne, W. E. Wilson, James. Woollings, Joseph.	300 00 500 00 500 00 300 00 200 00 150 00 235 57	·	-
Wright, E. A. Young, H. N. Timber.	500 00 300 00	12,446 96	
Christie, W. P. Hawkins, S. J. Henderson, Chas. Howie, R. G. Johnson, S. M. McDonald, Hector. McDougall, Ias. T. Margach, Wm Maughan, Joseph Stevenson, A. Oliver, J. A.	1,600 00 1,400 00 1,600 00 1,200 00 1,600 00 1,400 00 1,610 00 1,400 00 1,400 00 1,400 00 1,400 00		
Homestead Inspectors.		16,210 00	
Barr, James Burnes, C. W Chester, Thos	1,200 00 900 00 1,200 00		•
Carried forward	3,300 00	28,656 96	

Appendix No. 6.—Continued.

. Service.	\$ c.	\$ c.	\$ c
Brought forward AGENTS' SALARIES—("oncluded.	3,300 00	28,656 96	
Timber.—Concluded.			
Groulx, R. J. Hunt, Jas. McK. Hughes, Thos. Quenneville, Isadore. Watson, T. P. Dean, Thos.	600 00 350 00 150 00 600 00 915 00 248 08	6,163 08	
AGENTS' DISBURSEMENTS.		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Land.			
Baker, R. H Belyea, C. W Brown, J. B. Ruchanan, Thos. Byers, R. J. Campbell, Win Deacon, J. M. Freeborn, Dr. J. S. Grills, J. J. Handy, E. Hugh, Williams. Jenks, J. Jenkin, Wm Keefer, H. A. McFayden, Alex Parsons, W. J. Philion, J. A. Powell, F. R. Pronger, R. H Scarlett, H. S. Tait, J. R. Warren, D. B. Whybourne, W. E. Woollings, Joseph Young, H. N.	5 44 789 05 111 41 17 72 12 24 34 45 4 93 17 45 58 21 20 39 15 00 17 21 96 19 50 67 28 22 55 22 67 19 00 67 47 6 74 15 00 5 18 2 92 20 25 16 55	1,389 57	
Timber.		1,500 01	
Christie, W. P. Hawkins, S. J. Henderson, Chas Howie, R. G. Johnson, S. M. McDonald, Hector. McDougall, Jas. T. Margach, Wm. Maughan, Jos. Stevenson, A. Oliver, J. A.	382 20 431 08 367 11 367 35 199 25 556 80 506 37 2,241 00 548 78 420 33 749 83	6,770 10	

Service.	\$ c.	\$ c.	\$ c
Brought Forward		42,979 71	
Agents' Disbursements.—Concluded.			
Homestead Inspector.			
Barr, Jas. Burnes, C. W. Chester, Thos. Dean, Thos. Groulx, R. J. Hunt, J. McK. Hughes, Thos. Quenneville, Isadore. Watson, T. P.	442 60 697 87 267 18 60 15 228 05 109 39 197 47 168 65 311 65	2,483 01	
Miscellaneous.			
Ames, D. H., Caretaker Islands in Dog and Loughborough Lakes	20 00 4 00 27 00		
River Code, R. G., Inspection Lot 16, Baird St., Ottawa Coyne, P., Inspection Carr and Taylor Ellis, John, "Ops Fitzgerald. E. C, Inspection Merritt Fulton, Louis, Inspection Townsites Larder Lake, Elk	50 00 10 55 75 00 5 00 131 45		
Lake and Smyth. McDonald, A., Inspection Burns. Beckie, Albert, Inspection Wilson. Watts, Geo., Services. Disbursements.	716 63 150 00 100 00 1,570 00 619 89	2 470 50	
Ottawa.	,	3,479 52	48,942 24
Darby, E. J., Agent	1,500 00 200 00	1,700 00	
Larose, S. C., Clcrk Rent. Disbursements.	500 00 69 36	1,000 00	
Quebec.			3,269 36
Nicholson, Byron, Agent	1,500 00 112 50 37 50	1 650 00	
Rent Disbursements	125 00 316 05	1,650 00 441 05	2,091 05
Carried forward			54,302 65

Service.	\$ c.	\$ c.	\$ c.
. Brought forward			54,302 65
WOOD RANGING.			
Allen, R. A		1,130 00	
Ansley, J. J			-
Ansley, W. E.		0-0	
Arnill, Wm Barrett, Thos	1,300 00	394 00	•
Disbursements	7 23		
Dising MV A		1,307 23	•
Blair, W. ABliss, L. E			
Binnie, Thos		96 00	
Castonguay, A. C			
Chenier, D			
Coburn, Jno		390 00	
Corrigan, R. T		930 00	
Dodds, Thos		75 00 344 00	
Dugan, J. K.		158 00	
Durrill, Wm		1,750 00	
Ewan, John			
Fisher, Geo Fitzgerald, E. C		620 00 115 00	
Foster, E. G		798 47	
Fraser, Wm			
Gorman, P		900 00 468 46	
Graham, Fred S			
	111 00	985 00	
Hatch, J. W	$\begin{array}{c} 111 & 00 \\ 13 & 25 \end{array}$		
		124 25	
Hawkins, S. J		33 00	
Henderson, Chas		199 35 1,155 00	
Hickerson, M. T	210 00	1,705 00	
do1908	100 00	210.00	
Hill, H		310 00 13 50	
Huckson, A. H		1,245 00	
Hutton, John		960 00	
Hurdman, W. H		560 00 390 00	
Jervis, Henry		1,285 00	
Lee, James B		1,055 00	
Lucas, R. G.		194 62 290 00	
Manice, Wm		1,465 00	
Margach, J. A		210 00 61 53	
Maughan, Joseph		10 00	
Macdonell, R. D		100 00	
Matheson, Wm		1,290 00	
_		1,345 00	
Carried forward		27,700 41	54,302 65

Service	\$ c.	\$ c.	\$ c.
Brought Forward		27,700 41	54,302 6
Wood Ranging.—Concluded.			
Milway, James	1,068 00 5 60		
Morley, J. R	202 50	1,073 60	
do1908 Murray, Wm	699 85	902 35 1,635 00	
durray, Geo AcCaw, J. G		830 00	
AcCreight, John	808 30 113 88		
AcDonald, Hector, disbursements1907 do do1908	5 00 58 00		
McDonald, Angus		- 63 00 314 00	
McDonald, A. W. Disbursements	210 00 135 45	— 345 45	
IcDonald, A. J	596 00 14 48		
IcDonald, Thos			
IcNah, Alex. IcNahara, John		720 00	
IcPherson, James S		1,285 00 595 00	Ė
Oliver, J. A		635 00	
Purdy, John A		580 00 950 00	
Ritchie, James		487 31	
baw, George		800 00	
Bmith, J. D. C	,		
Thompson, George S			4-1-4-1
Vincent, H. TVagner, Fred		1,130 00 100 00	
Vatts, George Disbursements	395 00 320 60		
Veston, Frank RVhelan, P. J		780 00 1,560 00	
White, T. J. G. Vilkins, George.		860 00	
Wood, W. D		378 85	53,823 28

Service.	\$ c.	\$ c	\$ c.
Brought forward			108,125 93
Exploration and Estimation of Timber Berths.			-
Kennedy, W. C., services Disbursements.	301 00 315 54	616 54	•
Margach, William, disbursements		616 54 616 11 896 31	
DisbursementsFire Ranging.	876 89	1,457 89	3,586 85
Adams, Alex	360 00		
Disbursements Adams, M. J. Adams, Arthur Algoma Central Railway Co. Algoma Central and Hudson Bay Co. Algoma Commercial Co. Allen, C. G. Disbursements	342 50	370 85 292 50 131 00 23 56 9 63 7 49	٠
Alison, M. B. Disbursements.	185 00	355 40	
Almon, John E		201 15 132 00 81 00 131 00	
Angus, Robert Disbursements	345 00 7 55	352 55	
Archer, George Armstrong, J. T. Armstrong, J. C. Armott, Wm Asselin, Cyrile. Atkinson, Thomas S. Aubin, Geo Austin, H. G. Aylward, James Ayotte, L. Disbursements		131 00 240 00 118 50 130 00 131 00 139 00 131 00 80 00 85 00	
Baechler Lumber Co	330 00	226 10 86 50	4
Disbursements Banning, Edgar Barthiaume, Jos. Barrett, W. J. Beaudrey, Samuel Beck, C. Manufacturing Co.		360 85 123 00 99 00 5 25 131 00 15 00	

Service	\$	c.	\$	с.	\$	e.
Brought forward			4,320	33	111,712	78
FIRE RANGING—Continued.						
Begin, Autoine Bellefeville, Oliver. 1907 Bennett, G. A	355	00 20	140 131	00		
Beaton, Wm Benson, J. B. Bertrand, Paul Disbursements	357		374 152 131	00		
Bertrand, Isaac	360	00 20	361 112	00		
Bissaillon, Jno. Disbursements			376			
Black, Edward Bliss, L. E. Disbursements	820	00		00		
Bolt, Adolph		00 10	1,130			
Bolton, A. F		00 95	364			
Boisvert, Jno. D	131		300 105	00		
Booth, J. R		00 49	262	00		
Booth and Ostrom. Bouregard, A. Bowins, Jno. Disbursements	350		1,329 5 113	00		
Boyd, David			374 1 3 2 40 350 131 135	00 00 00 00		
Brink, G. C. Disbursements	255 30		285	95		
Bromley, E	247	50 40	131 131			
Buchanan, Robert	345		261 320			
			362	00		

	1		•
Service.	\$ c.	\$ c.	\$ c.
· · · · · · · · · · · · · · · · · · ·			-
Brought forward		13,195 77	111,712 78
FIRE RANGING.—Continued.			
Bury, F. J		280 00	
Burns, WmBurrow, Ernest		131 00 131 00	
Culhane, ACallahan, Art		113 00	
Disbursements		389 25	
Campbell, J. L		000 20	
Disbursements		1,340 55	
Campbell, Duncan			
Campbell, F. S.		269 50 292 50	`
Campbell, Bruce		126 00 36 00	
Campbell, Henderson		133 00 24 75	
Cameron & Co		131 00	
Canadian Copper CoCarling, I. T		81 20	
Disbursements		367 30	
Carney Lumber Co		142 50 48 00	
Caron Vital Cassiday, Jas.		133 00	
Disbursements		001 20	
Cavendish Lumber Co		281 30 33 25	
Chamberlain, B. E		105 00 125 00	
Charron Jos		127 00 131 00	
Christie, W. P., Disbursements. Clarke, Frank.		203 21	
Disbursements		200 00	
Clute, George		328 20 132 00	
Clysdale, AlexCoghlan, Thos		131 00 155 00	
Cole, J. J	355 00		
Collins, Herbert	287 50	375 60	
Disbursements	1	319 75	
Collins, James		60 00 131 00	
Collins, Chas		19 00	
Conger Lumber Co		159 05 96 00	
Conboy, Timothy Conway, Richard		131 00 131 00	
Carried forward			111,712 78

Service.	\$	c.	\$	с.	\$	с.
Brought forward		• • • • •	20,539	68	111,	712 78
FIRE RANGING.—Continued.						
Constantine, E			128	00 00 00		
Corrigan, M. B	255		132	00 2 00 . 00		
Disbursements	i	90		3 90 . 00		
Disbursements	3	30	18	30 30 300 300		
Crawford, Clarence		50 90	359	40		
Cripeau, J. A. Croteau, E. Crowe, R. C. Cruise, W. Disbursements.	287	50 15	109	00	:	
Culhane, D Cullin, M. T Cunningham, Jos Curtin, David				00 00 00		
Curtis, Wm Disbursements Curtis, Arthur		50	370	50		
Disbursements	337	20	363 131			
Cuthbertson, Wm Dale, R. T Disbursements	345	00 70	131	00		
Dale, Jno. A. Daley, Jno. Dane, Alfred. Davidson, Ira	360		359 131 107 131	00 00		
Disbursements	_	00	384	00		
Disbursements Davis, M. J	20	10	357 76	60 00		
Daveý, E Disbursements		00	123	00		

	1	1	1
Service.	\$ c.	\$ c.	\$ c. A
Brought forward		26,749 93	111,712 78
FIRE RANGING.—Continued.			
Dean, Thos. N	255 00 28 90		•
Dedine, Joel	362 50 8 00	283 90	* - न
Denison, H. J. Desantils, Noe. Desloges, J. E. Dickson, Lowery. do 1908	131 00	46 00	
Didier, L. P. Dillon, Pat. Dixon, John. Disbursements	305 00	261 00 131 00 117 00	
Dixon, L. A Disbursements		318 70	-
Doherty, John Dolman, E Disbursements		351 35 131 00	
Dowling, C Disbursements	377 50 25 50	296 15	
Doyle, T. J. Draycott, E. A. Draycott, F. W	56 00	403 00 131 00 130 00	-
do	265 00 2 40	162 00	-
Driver, James. Driver, Wilbert. Driver, Joseph. Dubeau, John. Ducharme, F.		38 00 135 00	
Disbursements Dufond, Ignace Duncan, Ed. J. Duval, C. A.	18 30	205 80 130 00 131 00	
Disbursements Eades, James H. Eady, Robt. S. Edwards, E. D. 1907	133 00	351 30 130 00 99 00	
do	362 50	275 00	
	19 50	382 00	
Carried forward		32,564 03	111,712 78

Service.	\$	c.	\$	c.	\$ c.
Brought forward		1000	32,564	03	111,712 78
FIRE RANGING.—Continued.					
Elliott, J Disbursements		5 00 3 00			
Enright Thos	360	0 00	331		
Erwin, Thos			374 129		
Ethier, A			37	00	
Evelyn, Wm	7	• • • • •	131	00	
Fautin Jos			131		
Ferguson, D	32	 5 00 0 00	131	00	
			345	00 .	
Ferguson, Wm. Disbursements	. 33	5 00 2 40			
			337		4
Ferguson, J. H		· · · · · ·	$\frac{131}{122}$		
Filshe, Edward			131	-	
Finlayson, J. H			131		
Firstbrook, W. H.			123	00	
Fitzgerald, Jas			131	00	
Fitzhenry, John		• • • • •	131 532		1
Fisher, GeoFisk, P. W		 	112		
Flanagan, Peter			360		
Flaherty, Jno Flett, C		• • • • •	158	00	
Foisev. M				75	
Forest Archie			131 122		
Fortier, Jos. Foster, Robt. S		 	131		
Fraser, W. E	380	00 (
Disbursements		8 80	448	80	
Gagne, Ferdinand	790 134	0 00 4 00			
			924		
Gagnon, Felix		 	113 153		
Gagnon, James			105		
Gale, W. T. Disbursements.	360	0 00 0 85			
	ļ		370		
Gallagher, James		 	155 131		
Garvin, Morgan	360) 00			
Disbursements		2 00	362	00	
Gaudette, Phillip			131		
Gaudette, Chas			118		
Carried forward			40,260	23	111,712 78

Service.	\$	c.	\$ c.	\$ c.
Brought forward			40,260 23	111,712 78
FIRE RANGING. ——Continued.				
Geddes, James	202 32	50 00		
Gemmill, John	375		234 50 548 00	:
Disbursements			431 85 475 00	
Gillies, J. R		• • • • •	56 25 35 00 147 05	
Gordon, Geo. & Co			51 00 117 00 120 00	
Gorman, M, Gongeon, A. Gonn, James.			131 00 152 00 115 00	
Grant, James	357	50	27 00	
Gravelle, John			375 20 131 00 131 00	
Graves, Bigwood & Co			20 00 131 00 37 00	_
Greer, Wm. Griffin, James		 	131 00 71 00 118 00	
Groulx, Arthur			131 00 131 00 158 00	
Guthrie, Wm. Disbursements.	347		353 90	-
Haig, Geo Hall, M. E Disbursements	340	 00 05	352 50	
Hall, Thos. Disbursements.	347		363 05	
Haley, Edward			36 3 80 133 00 29 00	
Hampshire, A		20	232 20	-
Hamel, Peter	360		131 00 540 00	
Disbursements			379 50 111 00	
Harrison, John and Sons			103 23	111,712 78

	1		
Service.	\$ c.	\$ c.	\$ c.
· Brought forward		47,558 26	111,712 78
FIRE RANGING—Continued.			
Hart, S. A. Disbursements.	330 00 30 00	200 00	
Hart, Ronald	332 50 23 65	360 00	
Harper, Thos		356 15 131 00	
Hartley, Mark Hawley, James		128 00	
Hawley, James		131 00	
Hawkins, Walter		30 00 1,871 50	
Haskins, Wm		131 00	
Hayward, Thos:	232 50	235 50	
Healey, Fred		:	
Healey, A Herbert, Louis Disbursements	330 00	212 85 30 00	
Henderson, E		332 80	
Henderson, John Henderson, C. B. Disbursements.	195 00	235 00 121 00	
Henders, C. W		218 65	
		316 90	
Hennessey, J. W	360 00	9 00 17 00	
Disbursements	10 10	070.10	1
Hillman, John		370 10 130 00	
Hickey, J. L.	. 	131 00	
Herlihy, Daniel	350 00		
Disbursements	20 05	370 05	
Holdsworth, John			
Holt, Geo Hodgins, Thos Disbursements	. 245 00	247 00 5 00	
		257 40	
Hope Lumher Co. Horn, J. A. Hooey, G. A.	250 00	144 32 27 50	
Disbursements	. 24 50	974 50	
		274 50	
Carried forward		54,382 48	111,712 78

Service.	\$ c.	\$ c.	\$ c.
Brought forward		54,382 48	111,712 78
FIRE RANGING—Continued.			
Howie, R. G		15 00	. 0
Hughes, Wm		429 70 133 00 126 00 131 00	, pr
Hunter, Lorne	305 00	292 50 29 00	
Disbursements	342 50	327 70 98 00	
Disbursements Jennings, C Disbursements	340 00 7 70	349 50	
Johnston, Chas Disbursements	52 50 2 60	347 70	
Johnson, H. C. Joyce, E. X. Keith, R. M. Disbursements	300 00 53 4 5	55 10 92 00 292 50	
Kellar, James	117 00	3 53 4 5	
Kennedy, Robert Kennedy, A.W. Disbursements	107 50 20 45	248 00 68 00	
Kelly, John		127 95 141 00 133 00 131 00	1
Kerr, J. H	295 00 26 1 5	321 15	
Kerby, John. 1907 Kidd, G. W. 1907 Kilby, H 1907 do 1908	133 00	117 00 53 00	
Lafleche, E. Lafleur, Wm Lalonde, R. H.		264 00 272 50 158 00	
Disbursements	49 15	341 65 131 00	
Lambert, Henry Lamarch, Jno. Lamb, W. J. Disbursements	335 00 37 20	126 00 131 00	
		372 20	

Service,	\$	c.	\$ c.	\$ c.
Brought forward	•••••	•••••	60,591 08	111,712 7
FIRE RANGING—Continued.				
Lauthier, Isadore Law, Wm. J. Lawson, David. Lawson, Elmer. Disbursements	365		112 00 131 00 115 00	
Larkins, Ed. Larocque, P. Lavois, E. Laying, Hy. Disbursements	330		381 70 131 00 126 00 131 00	
Leblanc, Oliver Leclaire, H. Learoyd, J. H. Ledward, Thos. H. Lee, Jas. B. Disbursements.	760	• • • • •	348 90 131 00 132 00 105 00 134 00	
Lemyre, M Lemyre, B Levack, Leander. Lovering, J. E Disbursements.	302	• • • • • •	961 84 134 00 145 00 150 00	
Lorenz, Fred Lorenz, Chas Longlad, O. Loveland & Stone. Lougheed, Robt. Disbursements		50	309 30 131 00 160 00 131 00 48 50	
Lynch, M. D		00	380 80 122 00	
Macfarlane, R. L. Mackie, Thos Maguire, T. C. Disbursements	255		262 00 131 00 365 00	
Mallory, M. Manes, Jno. Major, Hermidas. Martin M. Martin, Jos			277 80 79 00 131 00 131 00 140 00	
Disbursements Marion, Isadore Marshall, Jos Margach, Wm., disbursements Matte, Jos Disbursements	357	50	325 40 127 00 105 00 93 00	
Disputsements		10	363 60	•
Carried forward			67,773 92	111,712 78

Service.	\$	c.	\$	c.	, \$ c.
Brought forward			67,773	92	111,712 78
FIRE RANGING.—Continued.					,
Marcy, Wm Disbursements	$\frac{352}{24}$	50 45	0.72	•	1
May, Albert. Merchant, John Merchant, H Mercer, Whitefield Mercier, Pat Mickle & Dyment 1907 do 1908	175	98	376 131 432 270 123 131	00 00 00 00 00	
Millar, James	84	00	463 104		
Miller, Wm	300		111 131 133	00	
Mitchell, James	290	000	322	70.	
Mitchell, F. W. Mitchell, W. Minor, James. Morand, Louis Disbursements	320		t	00 00	
Morrison, H. L		2 50	330		
Morley, J. R		3 00 3 25	332		
Morgan Lumber Co	131	00		25 00	-
Morris, Jno. T. G		50 45	262	00	
Molyneaux, H. Molyneaux, Geo Montgomery, Wm Mongeon, Alex Montroy, J. J. Mond-Nickel Co. Mounsteven, John Moyer, Fred C. Disbursements	307		131 131 131 306	00 50 00 00 00	***
Mullin, Henry			322 131 132 119	00 40	

Service.	\$ c.	\$ c.	\$ c.
Brought forward		74,064 63	111,712 78
. Fire Ranging—Continued.			
Murphy, Jno Murphy, Chas Muskoka Mills and Lumber Co MacDonald, R Disbursements	340 00	133 00 166 00 2 50	
McAdams, Wm McBain, Roderick McCann, W.S. McCann, Sam Disbursements	265 00	382 80 131 00 130 00 112 00	
McCallum, Frank	255 00	275 80 62 00 158 00 492 00 158 00 119 00 131 00 122 00 32 60	
McCullough, David	382 50	290 80	
McDermot, James T. McDonald, Alex. McDonald, A. J. McDonald, Chas. Disbursements	345 00	407 40 105 00 79 00 133 00	
McDonald, D. N		374 90	,
McDonald, A. D		286 30	
McDonald, Frank		269 47	
McDonald, Alex		309 70	
McDonald, Thos	36 00	98 55	
McDonald, A., Estate of. McDonald, Geo. D. McDougall, James T., Disbursements. McEachren, John McFadden, Ed. McGarveys, Robt McGuey, Denis McGuire, H		48 30 24 00 131 00 674 52 131 00 152 00 131 00 105 00	
Carried forward		80 554 27	111,712 7

Disbursements 31 McIntyre, Frank 35 McKay, Angus 35 Disbursements 31 McKay, Murdoch 31 McKenzie, Wilbert 1907 McKensey, Joseph 1907 McKinley, Percy 1907 McKinnon, H 227 Disbursements 26 McLean, James 257 Disbursements 36 McLean, John 235 Disbursements 30 McLelan, Gregory 350 Disbursements 30 McLelland, James 227 Disbursements 31 McLeclan, Fros., Limited McLeish, Thos. McLeod, Dougald McMillan, Jos. McMillan, Jos. McMillan, Jos. McMillan, D 227 Disbursements 14 McMullen, Alex McNab, David McPhee, Hugh McPhee, Donald 287	е.	С.	\$ c
McGhie, Chas McHale, Michael 366 Disbursements 31 McIntyre, Frank McKay, Angus McKay, Hugh 357 Disbursements 31 McKay, Murdoch McKenzie, Wilbert 1907 McKensey, Joseph McKinley, Percy 1907 McKinley, Percy 1907 McKinnon, H 297 Disbursements 26 McLean, James 257 Disbursements 36 McLean, John 235 Disbursements 36 McLelan, Gregory 350 Disbursements 30 McLelland, James 277 Disbursements 31 McLachlin, Fros., Limited McLeish, Thos McLeish, Thos McLeish, McLeish, Wm J McLeod, Dougald McMillan, Jos McMillan, Jos 227 McMillan, Jos 227 <td>80,8</td> <td>554 27</td> <td>111,712 78</td>	80,8	554 27	111,712 78
McHale, Michael 360 McIvor, Hugh 360 Disbursements 31 McIntyre, Frank McKay, Angus. McKay, Hugh 357 Disbursements 31 McKay, Murdoch McKenzie, Wilbert 1907 McKensey, Joseph McKinley, Percy 1907 McKinnon, H 297 297 Disbursements 49 McLean, James 257 Disbursements 36 McLean, John 235 Disbursements 36 McLelan, Gregory 350 Disbursements 30 McLelland, James 227 Disbursements 31 McLechlin, Fros., Limited McLechlin, Fros., Limited McLeod, Dougald McLeish, Thos. McLeish, Wm. J McLecod, Dougald McMillan, Jos McMillan, Jos McMillan, D 227 Disbursements 14 McMollen, Alex McNivens, R McNab, David McPhee, Hugh McPhee, Donald 287			-
McIntyre, Frank. McKay, Angus. McKay, Hugh 357 Disbursements 31 McKay, Murdoch McKenzie, Wilbert 1907 McKensey, Joseph 1907 McKinley, Percy 1907 McKinnon, H 297 Disbursements 267 McLean, James 257 Disbursements 49 McLean, John 235 Disbursements 36 McLelan, Gregory 350 Disbursements 30 McLelland, James 277 Disbursements 31 McLachlin, Jno 4 McLeish, Thos 4 McLeish, Thos 4 McLeish, Wm J McLeod, Dougald 4 McMillan, Jos 227 McMillan, D 227 Disbursements 14 McMullen, Alex 4 McNab, David 4 McPhee, Hugh 4 McPhee, Donald 287		131 00 104 00	
McKay, Murdoch 1907 McKenzie, Wilbert 1907 McKinley, Percy 1907 McKinnon, H 297 Disbursements 26 McLean, James 257 Disbursements 49 McLean, John 235 Disbursements 36 McLelan, Gregory 350 Disbursements 30 McLelland, James 277 Disbursements 31 McLachlin, Jno * McLachlin, Pros., Limited McLeish, Thos McLeish, Thos McLeish, Geody McLeish, Wm J McLeod, Dougald McMillan, Jos McMillan, Jos 227 Disbursements 14 McMullen, Alex McNaillan, D McNab, David McPhee, Hugh McPhee, Donald 287	1 1 1	391 00 131 00 105 00	
McKinley, Percy 1907 McKinnon, H 297 Disbursements 26 McLean, James 257 Disbursements 49 McLean, John 235 Disbursements 36 McLelan, Gregory 350 Disbursements 30 McLelland, James 277 Disbursements 31 McLachlin, Jno * McLachlin, Pros., Limited * McLeish, Thos * McLeish, Wm J * McLeish, Wm J * McLeish, Jos * McMillan, Jos 227 Disbursements 14 McMillan, D 227 Disbursements 14 McMullen, Alex * McNab, David * McPhee, Hugh * McPhee, Donald 287		388 80 79 00 31 00 26 00	,·.
Disbursements 49 McLean, John 235 Disbursements 36 McLelan, Gregory 350 Disbursements 30 McLelland, James 277 Disbursements 31 McLachlin, Jno * McLeish, Thos McLeish, Thos McLeish, Wm J McLeod, Dougald McMillan, Jos McMillan, Jos 227 Disbursements 14 McMullen, Alex McNivens, R. McNab, Duncan McNab, David McPhee, Hugh McPhee, Donald McPhee, Donald 287	7 50 6 05	87 00 823 55	4.
McLelan, Gregory 350 Disbursements 30 McLelland, James 277 Disbursements 31 McLachlin, Jno* McLeish, Thos. McLeish, Wm. J McLeod, Dougald McMillan, Jos. McMillan, D 227 Disbursements 14 McMullen, Alex McNab, Duncan McNab, David McPhee, Hugh McPhee, Donald 287	9 35	806 85	
Disbursements	$\begin{bmatrix} - & & & & 2 \\ 0 & 00 & & & \\ 0 & 90 & & & \end{bmatrix}$	71 10 80 90	
McLachlin, Pros., Limited. McLeish, Thos McLeish, Wm. J McLeod, Dougald McMillan, Jos. McMillan, D 227 Disbursements 14 McMullen, Alex McNivens, R. McNab, Duncan McNab, Duncan McNab, David McPhee, Hugh McPhee, Donald 287	7 50 1 10 3	08 60 31 00	
McMullen, Alex McNivens, R. McNab, Duncan. McNab, David. McPhee, Hugh McPhee, Donald.	1 1 7 50	27 75 49 00 27 00 60 00 93 00	
McPhee, Donald	1 1 1 1 1 1 1.	41 65 56 00 72 50 95 00 02 00 31 00	
McGuire, A. & Co	7 50 5 70 3	23 20 26 10	
Disbersements	13	33 50 15 00 06 00	
Nadon, Telesphor	7 50 3 10 3 30	63 60 72 00	

Service.	\$ c.	\$ c.	\$ c.
Brought forward		87,244 37	111,712 78
FIRE RANGING—Continued.			
Jewman, R. J		47 00	
lewell, H. H. Disbursements	367 50 27 00		
Vewton, K. S	315 00 35 30	394 50	
		350 30	
evin, Nicholas		131 00 108 00	
icholson, Alex		131 00	
Jolan, Chas		131 00	
Torthern Timber Co		16 50	*
Voiseau, Fred		131 00	
Parien, Philip Parien, Martin		102 00 159 00	
liver, J. A., disbursements		294 99	
Imstead, R	225 00		
Disbursements	20 70	045 50	
'Neil, P. F.		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
ntario Lumber Co		38 6 3	
wens, Richard.		128 00	
age, Noe		133 00	
atterson, Wm		131 00	
arry Sound Lumber Co		8 2 05	
aul, H. S	490 00 354 03	044.00	
aquette, Oliver,1907		844 03 130 00	
earson, Pete.	322 50	100 00	
Disbursements	34 30		
1 777 73	045.00	356 80	
eck, W. E.	345 00		
Disbursements	22 85	367 85	
erault, Alfred		131 00	
eterboro Lumber Co		21 00	
igott, W. D	• • • • • • • • • • • • • • • • • • • •	59 00	
iper, E. Glayfair & White,	42 00	131 00	
do	36 75		
		78 75	
lourde, Chas		131 00	
orte, A. H	317 50		
Dispursements	25 15	342 65	
owers, J	220 00	012 00	
Disbursements	7 00		
		227 00	
reston, Harry,	330 00	133 00	
Disbursements	32 40		
		362 40	
rice, H. S.	350 00		
Disbursements	23 05	979 05	
		373 05	

Name.	\$	c.	\$	c.	\$ c.
Brought forward			93,754	57	111,712 78
FIRE RANGING—Continued.					*
Price, R. S		00	007	. 10	. ~.
Price, C. A Disbursements		50 50		10	-
Pringle, Alex		00		00	
Primrose, G. WProud, W. ADisbursements	. 322	50		50 50	
Purcell, Wm		50		65	
Purdy, Geo	. 302	 2 50 7 80		40	
Raby, John Railton, L. W Disbursements	. 352	 2 50 5 65		30	
Ranger, Antoine Rathbun Co. Raymond, Jos. Readman, R. Regan, John Reid, J. A. Disbursements	287	· · · · · · · · · · · · · · · · · · ·	272 295 71 292	15 50 16 00 50 50	
Reynolds, James	362			45	
Ridley, Robt Ritchie, R. & T. Roche, Henry Disbursements	. 195		160	20 0 00 3 00	
Ross, H. E	. 325	00 5 70	217	35	
Ross, Geo	. 245	00	33 8	3 70	
Ross, A. C. Rose, Geo	7		137 131 133 131 131	30 7 00 8 00 8 00 9 00 9 00	
Disoutsellies	.		334	05	

Name.	\$	с.	\$		c.	\$	c.
Brought forward	•••••		100,5	71	38	111,712	2 78
FIRE RANGING - Continued.							
Savard, Thos	430	00 75		31 38	00		
Sawyer, Nicholas			13 13 13 53 13 13 14 86 11 10	87 81 81 82 82 83 83 84 84 84 95 95	00 00 00 00 00 00 00 00 00 50		
Disbursements Shouldice, Edw Simpson, Alex Simmons, Geo Smith, A. L. Disbursements.	357		10 13 8)5 36 52	15 00 00 00		
Smith, Jos. Smith, Chas. Smith, D. H Smith, Wm. Smith, J. D. C. Spanish River Lumber Co.	322	50	13 13 13 13	31 31 31 31 24	65 00 00 00 00 00 50		
Disbursements Spence, W. H. Spreadborough, N: St. Amour, John. Standring, Chris. Stevens, A. W. Stevens, Arthur. Stevenson, Wm. Stevenson, W. O. Disbursements		50	13 15 14 13 13 13	31 29 44 36 13 98	95 00 00 00 00 00 00 00		
Stewart, Jacob	327	50	28	82	15		
Stewart, D. R. St. Eloi, J. C. Storey, S. F. Strain, John Strans, Philip Stranger, John			12 22 13	96 23 22 20 31	00 00 00 00 00 00 00		
•	1						

Name,	\$ c.	\$ c.	\$ c.
Brought forward	•••••	108,352 66	111,712 78
Fire Ranging-Continued.			
Streight, Samuel	170 00 31 3 5		*
Stockdale, W. G Disbursements	372 50 12 3 0	201 35	
Tang, John	355 00	384 80	
Disbursements	9 50 305 00	364 50	
Disbursements	3 00	308 00 79 00	
Thessalon Lumber Co	320 00	57 25	
Disbursements	1 90	321 90 106 00	
Phompson, Gordon	290 00 53 10	74 00	
Thomson, R. D		343 10 131 00	
Chompson, Geo. S		131 00 129 00 131 00	
Tobin, W. J Forrance, T. E Disbursements.		131 00	
Codd, C. C		348 45 282 50	
Towers, Ephraim		87 00 118 00 57 00	
Trusler, W. L	332 50 14 25		
Crussler Bros	3 77 50	346 75 18 00	
Disbursements	47 90	425 40	
Furner Lumber Co		76 89 126 00 124 00	
Tyson, Wm		125 00 532 00 158 00	
Vallentine, David	312 50	152 00	
Disbursements	300 00	337 65	
Disbursements	60 90	360 90	
· Carried Forward		114 991 10	111,712 78

Service.	\$	c.	\$ c.	\$	c.
Brought forward		-	114,921 10	111,712	78
FIRE RANGING—Concluded.					
Varmette, John. 1907 Victoria Harbor Lumber Co. Villiers, Claud Viverais, M. Waldie Bros. Wallace, Edw. Vallace, Geo. Wallace, Sam. Valker, James L. 1907			83 00 43 00 85 50 342 50 24 00 68 00 131 00 65 00		
Valsh, James		00	263 00 131 00 118 56		
Weigold, John 1907 Welton, Wm 1907 White, J. H. 1907 Wilson, J. H. 1907 Wilson, Frances 1907 Wilson, W. H. 1907 Disbursements 1907		00	86 00 144 00 59 00 49 00 38 00		
Wilkins, Geo. Williams, Wm	130	<u></u>	366 75 488 00		
Wickins, Harry Winters, J. W. Woollings, James Woollings, John Wood, J. B. Vray, Jos. Disbursements		50	260 00 204 00 131 00 217 50 135 00 4 00		
Wright, C. M	302 12	50	378 6 5		
Wright, Colin	360 25		314 80 385 90		
Youmans, JamesYoumans, D. H.			66 00 131 00	119,734	26
FOREST RESERVE.					
Temagami Reserve.					
Alexander, John	115 10		195 75		
Anderson, G. W	320 17		125 75		
Baker, H. W. Disbursements	352 17		337 55		
			370 05		

Service	\$	с.	\$	e.	\$	c.
Brought forward			833	3 5	231,	447 04
FOREST RESERVE -Continued.						
Temagami Reserve.—Continued.						
Bayliss, J. W. Disbursements	362 17		900	. 05		
Bell, A.McK	262 8			05		
Birch, J. F	140 15			27		
Cauldwell, N. S. Disbursements	325 16			20		
Cruckshank, H	342	50	341	65		
Disbursements	18	60	361	10		
Curry, D	$\begin{array}{r} 362 \\ 16 \end{array}$		379	30	•	
Deacou, W. A Disbursements	355 17					
Delbec, Trifle	412		372			
Duncan, Lewis	355 (16 (418			
Ellis, L. McI. Disbursements.	332 8 16 8		371	80		
Evans, R. R. Disbursements.	342 k		349	30		
Ferris, R., 1907. Disbursements. Ferris, R., 1908.	172 3 3 425 (50 70	360	05		
Foy, Edmund	210 (601	20		
Hammond, W. J. Disbursements.	172 8	50	. 227	55		
Hill, Milton Disbursements.	417 6	50	179	70		
James, C	417 8	50	423	50		
- Isotasemente.	······		423	50		
Carried forward	• • • • • • • • • • • • • • • • • • • •		6,449	57	231,	147 04

Service.	\$ c.	8 c.	\$ c.
Brought forward		6,449 57	231,447 04
Forest Reserve—Continued.			
Temagami Reserve.—Continued			
Johnson, Fred. G	335 00 17 55		
Keys, A. Disbursements.	375 00 16 30	352 55	
Lamarche, A Disbursements	932 50 4 35	391 30	
Lavigne, L Loucks, R. W. E Disbursements	345 00 23 10	936 85 225 00	
Lunney, J. W. Disbursements.	367 50 15 40	368 10	
Macdonald, S. C. Disbursements.	1,300 00 1,418 06	382 90	
Markle, G. A. Disbursements.	170 00 15 30	2,718 06	
McCammon, J. G	410 00 24 20	185 30	
McCormick, Victor	252 50 21 75	434 20	
McDougall, E. G	375 00 14 05	274 25	
McGregor, Peter	480 00 17 40	3 89 05	
McQuestun, G	142 50 3 60	497 40 146 10	
Milligan, Frank	365 00 16 80	381 80	
Montgomery, Alex	435 00 20 50	455 50	
Niddery, A Disbursements	237 50 10 85	248 35	
O'Connor, J Disbursements	417 50 6 00	423 50	
Petrant, WmPrudholme, AdolphDisbursements	415 00 35 90	422 50	
		450 90	

Service.	\$	c.	\$	с.	\$	c.
Brought forward	• • • • • • • • • • • • • • • • • • • •	1	6,133	18	231,447	7 04
FOREST RESERVE. — Continued.					-	
Temagami Reserve.—Concluded.	•					
Quirt, A Disbursements	325 5	00 15	000	3 e	,	
Ranger, T Disbursements	4 17	50 20	330			
Reed, W. J	400 14	1	426 414			
Robinson, G. C	372 14		387			
Rochon, Jos	887 4	50 35	891			
Rodden, J. J	280 3	00 30	283			
Shortt, Wm	317 14		332			
Simpson, Philip	4 92 7	50 80	500			
Sweeney, D	365 1 9		384			
n 71 ⁻	347 16	50	680 172	00		
Vivaris, D	365 21		3 6 4 3 2 5			•
Williams, Chas	362 20		386	75		
Wodehouse, R. P	325 17		382	80		
Metagami Reserve.			342	55		
Bruce, Geo	335 23					
Burdon, Jno Disbursements	650 168		358	20		
Butler, A. J	320 16	00	818	40		
-			336	65		

Service.	\$ c.	\$ c.	\$ c.
Brought forward		24,250 98	231,447 0
Forest Reserve.—Concluded.			
Metagami Reserve. — Concluded.		,	
Clark, C. S	352 50 19 15		
Duff, Alex	387 50 23 05	371 65	
Eveline, A. E	255 00 22 15	410 55 315 00	
Kersey, R. R	345 00 19 55	277 15	
Lennox, T. C	367 50 26 00	364 55	
Lewis, Richard	372 50 22 55	393 50	
Luten, W. F	352 50 25 95	395 05	
Lyons, H. W. Disbursements	322 50 20 05	378 45	
Robertson, A. D	322 50	342 55	
Disbursements	387 50	344 55	5
Disbursements	23 05 355 00	410 55	
Disbursements	19 55 380 00	3 74 55	
Disbursements	17 55	397 55	
${\it Missis}$ saga.			
Albright, Louis	402 50 19 50		
Bridgen, Charles	252 50 5.05	422 00	
Burroughs, H. C	265 00 15 45	257 55 .	
Carruthers, R. A	300 00 20 55	280 45	
		32 0 55	
Carried forward		30,307 18	231,447 04

Service.	\$ c.	\$ c.	\$ c.
Brought forward		. 30,307 18	231,447 04
Forest Reserve.—Continued.			
${\it MississagaConcluded.}$			
Clark, Karl A Disbursements	357 50 19 55		-
Cotton, Dean	280 00 10 77	377 05	
Fyfe, H. D	360 00 22 25	- 290 77	_ ′
Goldie, R. T Disbursements	345 00 20 00	382 25	
Hallock, James		- 365 00 295 00	1
Kinney, Wm Disbursements	720 00 240 32	000.00	-
Kroll, Victor Disbursements	375 00 17 55	960 32	٠
Meriam, W. O Disbursements	350 00 20 95	392 55	-
McLaren, Arthur A	357 50 32 20	- 370 95	
Orr, Wm. A Disbursements	307 50 19 55	389 70	
Richardson, G. B Disbursements	340 00 19 55	327 05	-
Rogers, N. W Disbursements	332 50	359 55	
Smith, Rex	17 55 357 50	350 05	
Disbursements	$\frac{21\ 55}{355\ 00}$	379 05	
Disbursements Walker, Gordon	$\frac{23 \ 75}{355 \ 00}$	378 75	
Whaley, T. R.	$\frac{22 \ 05}{85 \ 00}$	377 05	
Disbursements		108 80	- *
Nepigon.			
Armstrong, W. H	382 50 60 25	442 75	
Carried forward		36,853 82	231,447 04

	Service.	-	\$	c.	\$	e.	\$ (.
Brought for	ward				36,853	82	231,447 0
Forest	RESERVE—Contin	ued.	1			`	
Nepigon	Reserve. — Contin	wed.					
Deschamps, D Disbursements			392 40				
Dobson, John V Disbursements			340 55		432	50	
Duff, J Disbursements			345 50		395	10	
Griffler, W Disbursements			177 1	50 50	395	15	
Haig, D. W Disbursements.			$\frac{360}{52}$		179	00	
Halliday, W Disbursements			410 19		412	85	
Leitch, P. A Disbursements			1,050 242	00	429	00	
LeSueur, N. L			255 41	00	1,292	25	
Mills, Frank			140 29	00	2 96	50	
Mills, Percy E			235	00	169	75	
McDonald, Jos			410	00	278	35	
McKechnie, W. A. McNeil, E. H	• • • • • • • • • • • • • • • • • • • •		360		450 390		
Nesbitt, M		•	$\frac{56}{275}$	00	416	85	
Newhouse, Alex			$\frac{56}{422}$	50	331	85	
Ross, O. W			302	50	42 9	00	
Scott, H. J			327	50	326	70	
Walker, H			415	00	345	00	
Disbursements .			19	50	434	50	

Brought forward	300 00 56 90 342 50 48 40 357 50 43 50	356 90 390 90 401 00	231,447 04
Nepigon—Concluded. Watson, W. V. Disbursements. Widdifield, R. Disbursements. Williams, Frank. Disbursements.	56 90 342 50 48 40 357 50	390 90	
Watson, W. V. Disbursements Widdifield, R. Disbursements Williams, Frank Disbursements	56 90 342 50 48 40 357 50	390 90	
Disbursements Widdifield, R. Disbursements Williams, Frank Disbursements	56 90 342 50 48 40 357 50	390 90	·
Disbursements. Williams, Frank Disbursements.	48 40 357 50	390 90	op : .
Disbursements			· .
		401 00	
Eastern.			
Godkin, Jacob A	400 00	34 5 00 347 50	
Disbursements	371 50	771 50	
Sibley.			
Oliver, J. A		100 00	46 070 07
Mines and Mining.		· .	46,970 97
Miller, G. W services Disbursements.	4,250 00 760 40		
Knight, C. W. services Disbursements.	1,600 00 411 37	5,010 40	
Coleman, A. P services	500 00	2,011 37	
Disbursements	3,667 00	1,351 13	
Disbursements. Corkill, E. T services	2,000 00	4,329 40	
Price, S services	1,035 13 3,200 00	3,035 13	
Dance, R. W. services Disbursements	740 00 1,697 69	5,637 69	
		·	21,375 12

Service.	\$ c.	\$ c.	\$ c.
Brought forward			299,793 13
Explorations and Investigations.			
Baker, M. B		972 04	
Bartlett, James	233 70	1,483 70	
Battersby, William F. Bowen, N. L. Bruce, E. L. Burrows, A. G. Disbursements.	1,600 00	95 00 356 54 250 00	
Clemow, Thomas	124 00	1,953 79	
Foster, James. King, Shirley		211 75 80 00 250 00 85 00	
Mackenzie, G. C	804 29	2,313 68	
McPherson, W. B	475 96 968 48	60 00 1,444 44	
Robinson, A. H. A	2,000 00 712 60	2,712 60	
Rogers, W. R	303 84 385 46	689 30	
Scott, John Disbursements	600 00 280 60	880 60	
Foyne, John Disbursements	600 00 242 75	842 75	
Carried forward		14,681 19	299,793 13

Service.	\$ c.	\$ c.	\$ c.
Brought forward		. 14,681 19	299,793 13
Explorations and Investigations—Concluded.			
Buchanan, Norman, disbursements Empire Lumber Co. Farwell, C. F., fees Lyman Bros. & Co. Printing and stationery Tarling, C. & Co., maps Express.	6 75 34 85 10 00 58 32 73 23 50 50 9 40	24 3 05	14,924 24
Mining Recorders.		,	
Belyea, C. W., recorder	500 00 38 30	- 538 30	
Bowker, S. T., recorder	804 49 190 15	994 64	
Hough, J. A., recorder	1,200 00 900 00 366 50	2,466 50	
Lemieux, F. F., recorder	750 00 111 00	861 00	
Morgan, J. W., recorder	600 00 355 91		
McArthur, T. A., recorder	1,200 00 480 00 490 00	955 91	
McQuire, H. F., recorder	500 00 180 35	680 35	-
Torrance, Thos H., recorder	1,200 00 770 00 150 77 664 71	- 2,785 4 8	
Carried forward		. 11,452 18	314,717 37

Service.	\$ c.	\$ c.	\$ c.
Prought forward		11,452 18	314,717 37
MINING RECORDERS—Concluded.			*
Smith, Geo. T., recorder	2,100 00		
McAuley, N. J., assistant recorder	1,200 00		
Bruce, A. E. D., clerk	1,137 70		
Meagher, T. J. clerk	780 00		
Ferguson, R. A., clerk	390 00	-	
Munroe, Eva L., stenographer	720 00		
Smith, Miss M. H., stenographer	480 00		
Disbursements	1,541 51	2.212.21	
		8,349 21	
Miscellaneous.			
Canadian Express Co. Dominion Express Co. King's Printer. Warwick Bros. & Rutter	3 29 151 66 494 60 125 80	775 35	
Provincial Assay Office.			20,576 74
Turner, N. L Barlow, H. C	1,000 00	1,308 00	
Rothwell, T. E Disbursements	576 91 6 40	583 31	
Supplies Disbursements Equipment	446 35 564 42 395 62	1,406 39	
Cullers' Act.			3,297 70
Close, John L., services		12 00	
Courie, D. H., services. Johnson, S. M., disbursements. MacDonald, J. H., services		4 00 2 00	
Disbursements	1 55	9 55	
Carried forward		27 55	338,591 81

Service.	\$	c.	\$	c.	\$	c.
Brought forward			27	5 5	338,5 9 1	81
Cullers' Act.—Concluded.						
McDougall, James T., disbursementsOliver, J. A., disbursements			23	95 75	55	25
Surveys]	146,370	92
Board of Surveyors					200	00
Provincial Mines					30,648	16
Experimental Treatment of Ores					1,281	35
Unforseen					500	00
Refunds					19,145	89
					7	
Contingencies.			-			
Departmental.	0.000					
Printing and binding	2,893 6,769	02		.		
PostageExpress	2,050 359	54 79	9,662			
Telegraphing. Telephone messages. Telephone rent. Cab hire. Car fare.	30 6	64 80 00 00 00	2,410			
Subscriptions	227 2,522	20 44	774			
Typewriter, rents and repairs. Johnston H. E., travelling expenses. White Aubrey Whitson, J. F. Greenwood & Vester, funeral expenses.	142 161 38 376 201	45 75 35	2,749 (
Extra clerks. Burroughs adding machine. Sundries.	401 75	60 23	921 (9,239 3	39		
Bureau of Mines.				_	26,233	68
Printing and binding	1,447 2,276		3,724 8	31		
Carried forward			3,724 8		563,027	06
			, -		•	

Service.	\$	c.	\$	c.	\$ c.
Brought forward		• • • • •	3,724	81	563,027 06
BUREAU OF MINES-Concluded.					
Postage Telegraphing Express and cartage Advertising Subscriptions Maps	147 154 1, 2 80	39	4 000	10	
Gibson, Thos. W., travelling expenses		05 45	4,820		
Typewriter repairs, etc Canadian Telephone Supply Co., appliances Ellis, P, W. & Co., cabinet of ore Patterson, C T., adding machine. Bell Telephone Co., messages	10 78 50	3 05 0 00 8 85 0 00 5 30	296	50	
Extra clerks	1,250 275		292 4,550	20 43	
Sunuries			1,611	72	15,997 3
					\$579,024 3

D. GEO. ROSS,
Acccountant.

AUBREY WHITE,

Deputy Minister Lands and Forests.

Appendix No. 7.

Statement of Expenses on account of various services under the direction of the Department of Lands, Forests and Mines for the year 1908.

Service.	\$	c.	\$	c.	\$	c.
Diamond Drill.					-	
MacVicar, J. A	1.800 576		0.070			
Roche, E. K	1,737	10 00	2,376	56		
Labor	5,547		1,785	10		
Freight, Express &c	767		6,315	16		
Supplies	2,156 3,681	31				
Drill Furnishings			6,125	53	16,602	35
Algonquin Park	• • • • • • • •				9,981	
EMAGAMI TIMBER CUTTING					3,758	39
Rondeau Park		· • • • •			7,132	76
TORONTO EXHIBITION	· • • • • • •				798	47
VETERANS COMMUTATION					29,995	83
,				-	68,268	93

D. GEO. ROSS,
Accountant.

AUBREY WHITE,
Deputy Minister Lands and Forests.

Appendix No. 8.

WOODS AND FORESTS BRANCH.

Statement of Revenue collected during year ending December 31st, 1908.

	\$	c.
Amount of western collections at Department. do do Quebec	1,474,243 49,871 37,591 224,633	$\begin{array}{c} 06 \\ 13 \end{array}$
	1,786,338	99

J. A. G. CROZIER, Chief Clerk in Charge. AUBREY WHITE,
Deputy Minister.

Appendix No. 9.

PATENTS BRANCH.

Statement of Patents, etc., issued by the Patents Branch during the year 1908.

Crown Lands	
School do	
Mining do	
Public do (Late Clergy Reserves)	
Free Grant Lands (A, A.)	
do (Under Act of 1880)	
Rainy River Lands (Mining and Crown)	
Mining Leases	
Licenses of Occupation	
Rondean Harbor Leases	
Crown Leases	
Crown Lands (University) Patents	
Mining do do	
Free Grant, Act of 1901 (Veterans)	
Temagami Islands, Leases	
· Total	2

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

Agencies.	Area covered by timber license Square miles.					QUA	NTITY AND	
		· Saw logs.				Boom and Dimen		
		Pine.		Other.		Pine.		
		Pieces.	Feet B.M.	Pieces.	Feet B.M.	Pieces.	Feet B.M.	
Western Timber District Belleville Timber District Ottawa Timber District	11,664 1,065 ³ / ₄ 6,201 ³ / ₄	10,914,224 254,838 1,536,587	15,898,274 112,953,864	205,033 405,839	11,625,169	3,838		
	$18,931\frac{1}{2}$	12,705,649	582,315,346	2,620,269	86,387,845	294,468	37,839,83	

General Statement

Agencies.		Cordwood.			es:			183
	Cedar.	Hard.	Soft.	Tan Bark.	Railway Ties.	Posts.	Telegraph Poles.	Head Blocks
	Lineal feet.	Cords.	Cords.	Cords.	Pieces.	Cords.	Pieces.	Pieces
Western Timber District Belleville Timber District		38,71 2 230	11 ,33 8	15,7 2 6 22 2	4,342,072 1,097	560 389	4,228 2,184	8,195
Ottawa Timber District		3,110	3,138	480	10,758	60	2,945	
	24,125	42,052	14,476	16,428	4,353,927	1,009	9,357	8,195

J. A. G. CROZIER, Chief Clerk in Charge.

No. 10.

FORESTS.

Rent and Bonus during the year ending 31st December, 1908.

DESCRIPTION OF TIMBER.

Other.			Square timb	D:1	Dil. 41 1			
		Pi	ine.	Ash.		Piles.	Pile timber.	
Pieces.	Feet B. M.	Pieces.	Cubic feet.	Pieces.	Cubic feet.	Lineal feet.	Pieces.	Feet B. M.
37,949	6,468,918	18,528	850,162	12	407	183,136	2,033	203,909
2,474	1,095,993							
10,682	1,104,182							
51,105	8,669,093	18,528	850,1 6 2	12	407	183,136	2,033	203,909

of Timber. -Continued.

Stave Bolts.	Pulpwood.							
	Cords	Transfer bonus.	Interest.	Trespass.	Timber dues.	Bonus.	Ground rent.	Total.
3,751	88,370	\$ c. 1,269 15	\$ c. 9,408 74	\$ c. 66,430 25	\$ c. 1, 23 8,534 75	\$ c. 132, 2 90 91	\$ c. 42,455 00	\$ c. 1,490,388 80
		123 00	272 80	1,409 21	21,819 42		3,978 00	27,602 43
	8,660	674 00	1,054 2 8	1,598 83	139,545 68		18,582 00	161,454 79
3,751	97,030	2,066 15	10,735 82	69,438 29	1,399,899 85	132,290 91	65,015 00	1,679,446 02

AUBREY WHITE,
Deputy Minister.

Appendix No. 11.

Statement of the work done in the Military Branch of the Department of Lands, Forests and Mines, during the year 1908.

Letters received	8,500
written	7,700
Certificates issued.	408
Maps supplied to Veterans	3,000
Location certificates issued.	250
Locations made	750
Surrenders	625
References for patents issued	- 700
Letters to Military Settlers and Assignees of Veterans	204
Deticts to minutely defineds and hoofghees of veterans	, 201

R. H. BROWNE,

Chief Clerk in Charge.

AUBREY WHITE,
Deputy Minister.

Appendix No. 12.

Statement of the number of Letters received and mailed by the Department in 1906, 1907 and 1908.

		Let	ters receive	ed.					and from
Year.	Sales and Free Grants.	Surveys.	Woods and Forests.	Mines.	Totals.	Names indexed.	Orders-in-Council.	Returned Letters.	Letters, circulars reports mailed Department.
1906 1907 1908	21,525 24,871 22,478	11,490 13,463 11,263	9,620 9,218 9,386	7,702 10,060 9,183	50,337 57,612 52,310	59,250 63,120 58,900	262 284 243	80 92 84	60,000 66,000 70,000

FRANK YEIGH,

Registrar.

AUBREY WHITE,
Deputy Minister.

Appendix No. 13.

STATEMENT showing the number of Locatees and of acres located, of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties; and of patents issued under "The Free Grants and Homesteads Act" during the year 1908.

Township.	District or county.	Age	ent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No of patents issued.
Baxter	Muskoka	66 66 66	Bracebridge	7 4 8 6	704 484 1,540 902	8 1 1 	182 100 1 65½	5 4 6 3 	5
Macaulay Medora Monck Morrison Muskoka McLean	44 44 44 44	66 66 66 66	66 66 66 66	5 6	904 844 1,184	 1 3 6 1	$\begin{array}{c} 11\\129\\1\\12\\12\\12\\12\\2\end{array}$	5 3	34
Oakley Ridout Ryde Sherborne Sinclair		 	66 66 66	11 8 1 3 • 5	1,426 1,053 100 271 500	 4 3 1	102 17 66	$\begin{bmatrix} 10 \\ 8 \\ 5 \\ 1 \\ \dots \\ 2 \end{bmatrix}$	5 1 2
Stephenson Stisted	" " "	66 66	46	1 1 3 9	100 100 431 947	1 1 1	1 31 1½		5 2 3
Carling Christie Conger Cowper Ferguson Foley	Parry Sound	66 66 66	66 66 66	10 10 11 1 3	1,834 1,841 1,619½ 200 492	13	$44\frac{1}{2}$ 4520\frac{1}{2}	9 10 1 1 3	1 9 7 1
Hagerman Humphrey McConkey McDougall McKellar	66 66 66 66	66 66 66 66	66 66 66 66	. 1 3 3 6 10	98 448 364 863 1,430	1 1 3	40 ¹ 17	 1 2 5 5	4 5 5 2
McKenzie Monteith Shawanaga Wilson	66 66	 	 	5 13 2 1	1,217 1,985 208 78	1 1 1	1 4	3 1	1
Croft	Parry Sound	or. J. S. Free	Magnetawan	14 11	1,927 1,501	2 4	145 400	14 13	
Ferrie Gurd Lount Machar	66 66 66	66 66 66	66 66	10 3 8	283 1,474 400 999	1	31	4	8
Mills	66 64 46	44 44	66 66	3 10 5 7	477 1,609 1,000	1 1	$\frac{46\frac{1}{2}}{5}$	3	4

Appendix No. 13.—Continued.

			-,		,			
Township.	District or county.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumod.	No. of patents issued.
Armour	Parry Sound	W. Jenkin, Emsdale	4	395			1	
Bethune	"	"	7 5	1,254			6	
Joly McMurrich	"		7	$\frac{860}{1,051}$	1 2	21	5	
Perry	"	" "	3	495			3	
Proudfoot	"	"	6	847	1	21	. 3	
Hardy	Parry Sound	J. S. Scarlett, Powassan	10	1,597	3	106	1	
Himsworth	· · ·	" "	42	5,556	1	22	26	
Laurier	"		10	1,394	4		7	4
Nipissing		"	14 7	1,826}	3 5		10	11
Patterson				1,056	3	200	• • • •	-0
Bonfield	Nipissing	W. J. Parsons, North Bay	10	995			5	5
Boulter	"	"	16	2,112	i	13	7	8
Chisholm Ferris	"		60	6,703	1	12	34	
				0,100	_	1	"	
	Haliburton	R. H. Baker, Minden	1	101				
Glamorgan	"	" "	12	1,424	1	1	7	2
Hindon Lutterworth		" "	4	330	• • • •		1 3	
Minden	"	"	8	972	i	34	8	
Snowdon	"		18	2,369		4	2	
Stanhope	"	• ((4	$318\frac{3}{4}$				1
Anstruther	Peterboro'	T. G. Eastland, Apsley	3	331	1	25	2	3
Burleigh, N.D.	"	" "			3			7
Burleigh, S.D.			3	235	$\begin{vmatrix} 3\\2 \end{vmatrix}$		1	7
Chandos Methuen	5.6		4	100 500	2	$3\frac{1}{2}$	1	
meenden				000			1	
Cavendish	"	Jas. Wilson, Kinmount	2	201			1	
Galway			10	1,565	1	3	25	4
Cardiff	Haliburton		. 9	1,203			7	5
Monmouth	66		. 19	2,378			13	
Bangor	Hastings		. 6	590	3		1	
McClure			13	1,566	2	9	3	5 1
Wicklow			9	$1,096\frac{1}{2}$				1
Carlow	Hastings	J. R. Tait, L'Amable	1	93				2
Cashel	"	"	3	284				
Dungannon		"	8	753		12	4	
Faraday Herschel	٤,		11 6	$1,639\frac{1}{2}$	1	ł	11	
Limerick	"	"	1	121	····2	11/2		3
Mayo	66	"	3	462			3	
Monteagle	"	66 66	5	554	3	101	4	4
Wollaston			1	203			1	1
Algona, S	Renfrew	Adam Prince, Wilno	1	100			1	2
Brougham		" "	4	497	i	7		l
Brudenell		66 66	5	$449\frac{1}{2}$		2	6	2
Burns	"	"	44	5,863	4	16	,	
Grattan Griffith			10	$937\frac{1}{2}$			4	3
		•	•••••		• • • •		••••	. 1

5a L M.

Appendix No. 13.—Continued.

		I I							
Township.	District or County.	Ag	ent.	No. of Persons Located	No. of Acres Located	No. of Purchasers	o. of Acres	No. of Lots Resumed	of Patents Issued
1				No.	ž	4	No.	ă"	No.
Hagarty	Renfrew	Adam Prince	, Wilno	8	854			7	3
Jones	•••	"	"	2	217	1	97		5
Lyndoch	Nipissing	"	"	4 11	495 1,286	1	11	6	3
Matawatchan	"		44	i	163				2
Radcliffe	4.6	44	"	7	939	2	46	3	
Raglan	"	"		9	952	1	57	3	11
Richards	"		66 64	10	1,384			3	2
Sebastopol		"	"	2	242 968		1.4	1	
Sherwood	•		••	7	908	1	14	6	'
Algona, N	1 **	D. B. Warren	" "	' 2 5	298 501			4	
Buchanan (pt)	"	"	"	5	582			3	
Fraser	"		"	2	300				2
Head		"	66					5	
Maria McKay (pt)	**	44	"						
Petawawa	"	44	"	2	204	4	81	1	4
Rolph	",	44	"	2	240				1
Wilberforce	"	4.	4.6	1	100	1	2		2
Wylie (pt)		"	"				• • • • •		2
Calvin	Nipissing	Jas. Jenks, I	lattawa	5	497			2	2
Cameron (pt).	- "	"	4.6	2	200				4
Lauder	• •	"	" "	3	409				
Mattawan	"	66	"	4 20	559	$\frac{1}{2}$	1	2	
Papineau			•	20	2,242	2	61	11	9
Korah	Algoma	B. J. Rothw	ell, Sault Ste.		100			١.	,
Danks	"	44	Marie	$egin{array}{c} 1 \\ 2 \end{array}$	160 240			$\frac{1}{2}$	
Parke Prince	"	4.6	"	15	2,129	i	114	13	
111110011111111					· ·				1
Aberdeen		Thos. Bucha	nan, Thessalon		993	1	1641	}	
Galbraith			"	$\frac{4}{2}$	$613\frac{1}{2}$		3		1 1
Lefroy Plummer		"	"		254				1
do .add.		"	"						1
St, Joseph Is'd	"	W. E. Whyh	ourne, Marksville	24	•2,652	3	1022	22	7
Merritt	66	R. J. Byers,	Massey	ĺ					
Riako	Thunder Bay	_			1,421	1	160	6	5
Blake Conmee	"" Day	11. 11. 1500	i, i oit miniui	36	5,769			11	
Crooks	66	4.6	44	5	990			2	
Dawson Road.	44	**	44	6	$835\frac{1}{2}$			6	
Dorion	46	**	"	12	1,755		1.00	13	
Gillies			66	10 16	1,604	$\frac{2}{2}$	163 40	8	
Gorham Lybster	"	"	"	12	$\frac{2,620\frac{1}{2}}{1,904\frac{1}{2}}$			18	
Marks	"	"	"	12	$1,875\frac{1}{2}$				
McIntyre	"	4.6	"	9	1,094			13	
McGregor	"		44	1	160				2
O'Connor			"	10 17	$1,460\frac{1}{2}$ $2,482\frac{3}{4}$		$285\frac{1}{2}$	14	
Oliver	•			. 1/	4,404	- 0	16	1.47	

Appendix No. 13.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Paipoonge, N R " S R Pardee Pearson Scoble Strange	Thunder Bay	H. A. Keefer, Port Arthur	3 18 18 7 24	300 1,806 2,795 1,005 3,778	$egin{array}{c} & \ddots & \\ & \ddots & \\ & \ddots & \\ & \ddots & \\ & 2 \end{array}$	93 160 165½	5 18 5 5 27	1 4 2 5 3 1
Atwood Blue Curran Dewart Dilke Morley McCrosson Nelles Pattullo Pratt	Rainy River		14 17 13 17 13 11 16	1,893\\\ 2,678\\\ 82\\\ 405\\ 2,713\\\ 1,775\\\ 1,439\\\ 2,582\\\\\ 2,582\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5 4 3 7 4	103½ 159½ 111¾ 145½ 123½ 40¼	3 1 4 14 11 13 5	 10 2 2 7 7 10 5
Rosebery Shenston Spohn Sutherland Sifton Tait Tovell Worthington	44 44 44 44 44	44 44 44 44 44 44 44 44 44 44	2 18 34 24 8 32	241 2,298 5,520 3,530§ 1,192 5,115	7 4 3 12 8 5 1	101 1791 1191 613 53 2531 27	9 26 14 17 23	6 7 3 2 9 5 4
Aylesworth. Barwick. Burriss. Carpenter Crozier. Dance. Devlin. Dobie. Fleming. Kingsford. Lash. Mather. Miscampbell. Potts. Richardson. Roddick.	44 44 44 44 44 44 44 44 44 44 44 44 44	Alex. McFayden, Emo	1 10 5 8 26 3 7 4 21 7 10 18 15	147 	32 55 52 2 2 4 4 4 2	87 61 54 360½ 88 80¾ 146 44 191¾ 82	1 11 4 5 11 3 7 19 6 12 14 6 3	2 658353 4449322
Aubrey Eton Langton Mutrie Rugby Sanford Vanhorne Wainwright Zealand	66 66 66 66 66	R. H. Pronger, Dryden """ """ """ """ """ """ """	3 10 17 1 28 1 10 7 24 15	473 $1,473\frac{3}{4}$ $2,862\frac{1}{2}$ 205 $4,621\frac{1}{2}$ 160 $1,354$ 869 $3,192\frac{3}{4}$ $1,998\frac{3}{4}$		55 1,704½ 34 94 120 206 29	$egin{array}{c} 2 \\ 2 \\ 2 \\ \cdots \\ 1 \\ 7 \\ 4 \\ 2 \\ \end{array}$	6 4 1 3 6 14 10 7
Melick Pellatt	66	C. W. Belyea, Kenora	74 77	$10,802 \\ 10,714\frac{1}{2}$		$1,196 \\ 632\frac{1}{2}$	9 5	11 4

Appendix No. 13.—Concluded.

Township.	District or County.	Age	· nt.	No. of persons located	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
	Sudbury	J. A. Lemieux	, Sudbury	$\frac{15}{20}$	1,969 ₁ $2,297$	$\begin{vmatrix} \cdots \\ 2 \end{vmatrix}$	36	$ \cdots_{2}$	7 8
Capreol Hanmer	"	"	"	35	$\frac{2,297}{4,576\frac{1}{2}}$			10	
Balfour	. "	J. K. MacLen	nan. Sudbury	14	1,873	2	254		13
Broder	"	"	"	20	$2,994\frac{1}{2}$	1		2	
Chapleau	Algoma	"	"	1	165				
Garson	Sudbury	"	"	17	2,422	5			
Neelon	"	"	"	11	$1,505\frac{1}{4}$	4	2181	• • • •	8 6
Rayside			,	5	602] 		o
Appleby	"	E. A. Wright	. Warren	24	3,882	9	2053	1	14
Casimir	44	' '	"	11	1,630				9
Dunnet	"	"	"	20	3,181	5	$21\frac{3}{4}$		
Hagar	"	46	4.6	22	3,553	1	164	1	
Jennings	1	"	"	9	$1,274\frac{1}{2}$				7
Kirkpatrick	Nipissing		"	24	$3,597\frac{1}{4}$	5			
Ratter	Sudbury			19	$3,042\frac{1}{2}$	1	6	2	11
Caldwell	Nipissing	J. A. Philion, 8	Sturgeon Falls	22	2.9124	3	400	 	15
Cosby	Sudbury	44	"	13	2,041	2	4		10
Grant	Nipissing	"	"	3	308	2	280		
Macpherson		"	"	40	$5,677\frac{1}{2}$	2			27
Martland	Sudbury		"	22	3,083	4			16
Springer	Nipissing	••	••	15	1,905			1	47
Abinger	Lennox and								
J	Addington	Chas. Both, D	enbigh	2	400				8
Clarendon (pt)Frontenac	"	"	2	316				
Denbigh		.,					1		
	_ Addington	"	"	4	498				2
Canonto, S	Frontenac	· · · ·			• • • • • • •	• • • •			;
" N Miller (pt)	"	"	"	2	2 99	• • • •			$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$
Palmerston(pt)	"	* "	"	1	197			1	3
				_				1	_
	Nipissing	Unattached		9	1,424	5			10
Finlayson	"	"		2	379	1	9		1
Murchison	"			6	910	1	2		4
Sabine	,,	••		7	1,092	1	1404		8
				2,110	297,543	383	14480	977	1089

W. C. CAIN, Clerk in Charge. AUBREY WHITE,
Deputy Minister.

Appendix No. 14.

Statement of Municipal Surveys for which instructions issued during the year 1908.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.
1	A. I., Russell	663	Jan. 28, 1908	To survey certain streets in the city of Port Arthur, in the district of Thunder Bay, including North and South Water Streets, Cumberland Street, Court Street and Algoma Street, and all intersecting Streets between John Street and McVicar Street, and to have the corners of the streets marked by iron bars duly planted thereat.
2	C. D. Bowman .	664	Feb. 5, 1908	To survey part of the line between the township of Waterloo in the county of Waterloo and the township of Guelph in the county of Wellington, from the north easterly angle of the township of Waterloo, southerly along the easterly limits of lots 97, 98, 99 and 100 of the German Company tract of Waterloo, and to mark by stone or other permanent monuments at the several corners in the easterly limit of the said township of Waterloo, and also at each end of the several concession lines of the township of Guelph abutting on said boundary between the said points.
3	E. G. Barrow	665	May 2, 1908	To survey the limits of the original allowance for road between the broken front and the first concession of the township of Barton, in the county of Wentworth, known as the base line, and now within the limits of the City of Hamilton, said survey to be made from the intersection of the said base line with the allowance for road between lots Nos. 4 and 5 in the said township of Barton, known as Ottawa Street, to the westerly terminus of such base line, and that durable monuments be placed marking the limits of the original allowance for road between the above points.
4	W. H. Fairchild	666	May 2, 1908	To survey the road allowance between the 3rd and 4th concessions of the township of East Oxford, in the county of Oxford, across lots Nos. 16 to 18 inclusive, or as much farther on either side as may be necessary to find an original monument, and to mark the road allowance across lots Nos. 16 to 18 inclusive, with permanent monuments on each side of said road allowance.
5	H. J. Beatty	667	Sept. 21, 1908	To survey the portion of the road allowance between the 7th and 8th concessions of the township of Ross, in the county of Renfrew, extending from lot No. 22, or as near thereto as the original post can be found to the town line between Ross and Horton, and to establish the same by planting permanent monuments on either side of the said allowance for road.
6	W. H. Fairchild	668	Nov. 6, 1908	To survey the road allowance between lots Nos. 7 and 8, east of the North Road, in the township of Houghton, in the county of Norfolk, and to establish the same by planting permanent monuments on either side of said road allowance.

Appendix No. 14.—Concluded.

Statement of Municipal Surveys for which instructions issued during the year 1908.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.
7	Geo. L. Brown .	669	Dec. 21, 1908	To survey the boundary road allowance between the townships of Osnabruck and Cornwall, and to have the said boundary marked by permanent stone or iron monuments at the expense of the municipality of the township of Osnabruck, in the county of Stormont.
	Isaac Traynor	670	Dec. 31, 1908	To survey lots Nos. 28 to 32 inclusive, in the 14th concession of the township of East Luther, and also the side road between lots 30 and 31, in the said 14th concession, and to plant permanent monuments at the angles of the said lots on each of the said side road allowance.

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No 15.

STATEMENT OF MUNICIPAL SURVEYS CONFIRMED DURING THE YEAR 1908.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Surveys.	Date when confirmed under R. S.O., 1897, Chap. 181, secs. 10 to 15, inclusive.
1	John H. Moore	653	October 14, 1904	To survey the allowance for road forming the boundary between the Township of Osgoode in the County of Carleton, and the Township of Mountain in the County of Dundas, and to mark the limits of the said original road allowance by permanent stone or iron monuments on each side of the said original road allowance.	
2	Thos. Byrne	661	September 24, 1907		ı
3	E. T. Wilkie	662	October 3, 1907	To survey the line between lots 5 and 6, concession 3, in the Township of Hinchinbrooke, in the County of Frontenac, and to plant permanent monuments at the front and rear angles of said line.	

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,

Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys in progress during the year 1908.

No.	Date of instructions.	Name of surveyor.	Description of survey.	Amount paid.
_				
1	May 28, 1908	T. D. Green	Survey of township of Umbach, District of Rainy River	2,400 (
2	May 27, 1908	T. Byrne	Survey of township of Skead, District of	ĺ
3	Apr. 28, 1908	W. Murdoch	Nipissing Survey of township of Morson, District of Rainy River	1,600 (2,800 (
4	Oct. 31, 1908	De Morest, Stull &		2,000
			Survey of burnt territory east of Mozhaboug Lake, Sudbury	200 (
5	May 29, 1908	J. Hutcheon	Survey of township of Sankey, District of Algoma	5,000 (
6	May 29, 1908	J. Hutcheon	Survey of township of Fleck, District of	•
7	Feby. 1, 1908	Speight & Van	Algoma	6,000 (
		Nostrand	Survey of Abitibi Lakes and Islands, District of Nipissing.	3,500
8	May 27, 1908	Jas. Dobie	of Nipissing	7,000
			Total	28,500 (

GEORGE B. KIRKPATRICK, Director of Surveys. AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 17.

Statement of Crown Lands Surveyed, completed and closed during the year 1908.

lo.	Date of Instructions.	Name of Surveyor.	Discription of Survey.	Amount Paid.	No. o
				\$ c.	
. 1	May 31st, 1906	J. J. Francis	trict of Rainy River	640 79	49,78
			Otto Kellberg, for services with J. J. Francis	50 00	
			J. J. Francis	5 0 00	
i			Francis	20 00	
	8		J. J. FrancisFrank Lewin, for services with J. J.	20 00	
			Francis	40 00	
			nished J. J. Francis	81 80	
			J. J. Francis	87 13 548 28	-
			Biggar & McBrayne, for J. H. Ryck- man, services	275 00	
			Franklin S. Wiley, for wages E. G. Spreng, for services with J. J.	100 00	
			Francis	40 00	
2	July 10th, 1907	J. H. Burd	J. J. FrancisSurvey of township of Jamieson,	65 00	00.00
3	July 10th, 1907	J. H. Burd	District of Sudbury Survey of township of Jessop, District of Sudbury	1,470 60 1,475 32	23,00 23,03
4	May 6th, 1907	T. Byrne	Survey of township of Bayly, District of Nipissing	770 00	22,90
			Survey of township of Devitt, District of Algoma	1,378 00	51,78
		•	Survey of township of Staunton, District of Algoma	1,385 30	51,85
- 1			Survey of township of Reaume, District of Sudbury Survey of 3 blocks, Thunder Bay	1,533 72	23,09
	May 30th, 1907	3. B. Doble	Branch G. T. P. Ry., District of Rainy River	1,141 47	
9	May 25th, 1907	T. Fawcett	Survey of 4 blocks, Thunder Bay Branch G. T. P. Ry., District of	,	
10	May 20th, 1907	W. Galbraith	Thunder BaySurvey of township of Leitch, Dis-	2,845 00	F1 70
11	May 30th, 1907	J. J. Dalton	Survey of 3 blocks, Thunder Bay Branch G. T. P. Ry., Rainy River	1,176 00 2,445 00	51,76
12	May 20th, 1907	T. H. Dunn	Survey of township of Mabee, District of Sudbury	874 90	23,03
- 1			Survey of township of Laidlaw, District of Sudbury	1,535 68	23,11
- 1			Survey of boundary between Algoma and Thunder Bay	5,625 00	
- 1			Survey of township of Mountjoy, District of Sudbury	779 52	23,06
ļ			Survey of the township of Godfrey, District of Sudbury Survey of the township of Barker,	1,995 34	23,18
-1	may 0th, 1007	ous, mucheum	District of Algoma	2,375 90	51,75

Appendix No. 17.—Continued.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of acres
-					
18	May 6th, 1907	Jas. Hutcheon	Survey of township of Eilber, Dis-	\$ c.	F1 055
19	May 27th, 1907	L. V. Rorke	Survey of township outlines west of Montreal River, District of		51,655
20	Dec. 9th, 1906	Joseph Cozens	Nipissing	7,349 09	
21	Oct. 21st, 1907	J. H. Smith	trict of AlgomaSurvey of town site of Smyth, Dis-	47 45	
			trict of Nipissing	69 31	
	_		River Districts	629 74	
			District of NipissingSurvey of Timber Berth W.D. 5. South of Windermere Lake,	1,578 00	51,780
25	June 2nd. 1908	C. H. Fullerton	Algoma Survey of parts of townships Maison-	562 58	
			ville, Benoit, District of Nipissing. Survey of Permit No. 5, Black River,	1,985 90	19,859
			District of Rainy River Survey of Base and Meridian Lines,	60 00	
			Mississaga Reserve, Algoma, Survey of township of Steele, Dis-	5,053 27	
- 1			trict of Nipissing	6,107 68	37,005
			trict of Nipissing	3,489 06	22,779
- 64			Survey of township of Berry, District of Nipissing.	2,861 87	16,683
			Survey of township of Kingsmill, District of Sudbury	3,522 52	23,018
			Survey of town site in Brower, District of Nipissing	1,874 80	
			Survey of part of township of Fra- leigh, District of Thunder Bay	1,062 30	7,323
			Survey of outlines of townships in Temagami Forest Reserve	7,718 12	
35	May 21st, 1908	Speight and Van Nostrand	Survey of base and meridian lines, Districts of Algoma and Thunder		
36	June 2nd, 1908	J. H. Smith	Bay Survey of Gillies Limit, District of	11,522 10	
37	May 27th, 1908	T. J. Patten	Nipissing	5,708 50	57,085
38		Jos. Cozens	trict of Algoma	5,618 41	
-			mentary Estimates	402 00	
40	Aug. 5th, 1908	J. W. Fitzgerald	trict of SudburySurvey of outlines of townships south of Night Hawk Lake, Districts of	5,212 10	52,121
41	May 30th, 1907	J. J. Dalton	Nipissing and Sudbury Survey of Grand Trunk Pacific Block VII., Districts of Rainy River and	2,068 63	
42	July 20th, 1908	L. O. Clark	Thunder BaySurvey of timber berth east of	2,640 00	
- 1	-		Lockhort, District of Nipissing Survey of addition to town plot of	249 14	
			Smyth, District of Nipissing	909 45	

Appendix No. 17.—Concluded.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of Acres.
44	Sept. 9th, 1908	D. J. Gillon	Survey of lines in townships of Morley and Pattullo, District of Rainy River. E. Harcourt & Co., lithographing Maps Art Metropole, blue print machine C Tarling & Co., mounting maps Steinberger, Hendry Co., 5 copies of maps of Ontario The Map Specialty Co., 2,500 maps of Watten Township The Map Specialty Co., 1,503 maps of Widdifield Township Rice Lewis & Son, iron posts G. W. Fullerton, inspection of lots in Redditt Township G. W. Fullerton, inspection of land crossing, Winnipeg River C. W. Belyea, 2 maps of islands in Gun and Sandy Lakes William Margach, Permit No. 5, Black River, Rainy River	170 95 4,091 25 348 00 968 55 22 50 78 50 61 50 401 80 95 00 19 75 34 85 25 00	
			Zamon Ittor, Imily Intol.	117,870 92	780,676

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests

Appendix No 18.

TOWNSHIP OF HAGGART, DISTRICT OF SUDBURY.

Peterborough, Ont., November 25, 1908.

SIR,—I have the honour to report the completion of the survey of the township of Haggart, in the District of Sudbury, performed under instructions from your Department, dated June 2nd of this year. I beg to submit also the field notes and plans of the township, all of which I trust will be

found complete and satisfactory.

As instructed I commenced the survey at the southwest angle of the township of Kendrey, from this point I chained northerly along the east boundary of the township making the first two concessions fifty-nine chains and fifty links each in depth. Owing to the line in the centre of the road allowince between concessions four and five having been previously surveyed by the Messrs. Patten & Speight, concessions three and four have a depth of sixty chains and four links each on the east boundary, concession five and six were given a depth of fifty-nine chains and fifty links on this line. From the points thus established I ran the lines in the centre of the road allowances between concessions two and three and six and seven due west astronomically to the west boundary; the various side lines were run north and south astronomically to the north and south boundaries respectively from the base line previously established by Messrs. Patten & Speight. The north boundary I ran due west astronomically from the northwest angle of the township of Kendrey. The lines in the centre of the road allowances between concessions eight and nine and ten and eleven were run east and west astronomically from side road line between lots twelve and thirteen.

As will be seen by the plan, I did not run the side line in the centre of the road allowance between lots eighteen and nineteen through concessions five and six, as I thought it better to leave lot eighteen extend to the road

allowance along Departure Lake.

To all the regular lots I gave a uniform width of twenty-five chains and twenty-five links allowing a side road allowance of one chain in width between lots six and seven, twelve and thirteen, eighteen and nineteen, and twenty-four and twenty-five; also a half road allowance of fifty links along the west side of the east boundary and along the east side of the west boundary. A road allowance of one chain in width was also allowed for between each alternate concession; namely, between concessions two and three, four and five, six and seven, eight and nine, and ten and eleven. A half road allowance of fifty links was also allowed for along the north side of the south boundary and along the south side of the north boundary.

Good posts made of the most durable wood to be had in the vicinity were planted along the various concession lines between the lots, one on the line itself as a guide post with the numbers of the lots cut on the east and west sides and the letter "R" cut on the north and south sides, one fifty \mathbf{of} the guide post; and one fifty links south post with the numbers of the lots cut the guide and west sides and the number of the concessions or "R" cut on the north or south sides as the case might be. At the intersection of the centre lines of the different side road allowances with the centre line of the different concession road allowances, good posts were also planted with the letter "R" cut on the north, south, east and west sides. Good posts were also planted at the angle of each of the four adjoining lots, with the number of the concession cut on the north or south side as the case might be, and the number of the lot cut on the east or west side as the case might be, and the letter "R" cut on the two sides facing the concession and side road allowances, these posts were planted at a distance of fifty links from the centre of the side road allowances and fifty links from the centre of the concession road allowance.

Where the front angle of a lot fell in a lake or in the Poplar Rapids or Muskego River, the posts were projected to the proper points on the north or south, or on the north and south shores thereof, these points were planted at a perpendicular distance of one chain from high water mark. Witness. posts with the number of the lots marked on the east and west sides were also placed at high water mark, and where they were to be had several trees in the vicinity were blazed in a conspicuous manner. A road allowance of one chain in perpendicular width is allowed for along each side of the Muskego and Poplar Rapids Rivers, also around all large lakes and around all lakes cut by the concession and side road allowances. All these road allowances are marked by good durable posts planted on the lines of survey, with the letter "R" cut on the side facing the road allowance.

To all posts with the exception of the guide posts, the witness posts, and the posts defining a road allowance, suitable bearing trees were taken, full

descriptions of which will be found in the field notes.

In order to make the survey more permanent in case of the destruction of the wooden posts by fire, iron posts of the following dimensions and marked with a cold chisel were placed at the following points:—

An iron post one and seven-eighths inches in diameter and three feet long at the northwest angle of the township with the name "Haggart" cut on the southeast side, "Con. XII." on the south side, "Lot XXVIII." on

the east side, and "R" on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter and three feet long at the intersection of the line in the centre of the road allowance between concessions six and seven with the west boundary line marked "Con. VII." on the north side, Con. VI." on the south side, "Lot XXVIII." on the east side, and the letter "R' on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter and three feet long on the north boundary line at its intersection with the line in the centre of the road allowance between lots twelve and thirteen marked "Con. XII." on the south side, "Lot XII." on the east side, "Lot XIII." on the west

side, and the latter "R" on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter and three feet long at the intersection of the line in the centre of the road allowance between concessions six and seven, with the line in the centre of the road allowance between lots twelve and thirteen marked "Con. VII." on the north side, "Con. VI." on the south side, "Lot XII." on the east side, "Lot XIII." on the west side, and the letter "R" on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter and three feet long on the south boundary line at its intersection with the line in the centre of the road allowance between lots twelve and thirteen marked "Con. I." on the north side, "Lot XII." on the east side, "Lot XIII." on the west side

and the letter "R" on the north, south, east and west sides.

An iron post one and one-quarter inches in diameter and three feet long on the east boundary line at its intersection with the line in the centre of the road allowance between concessions six and seven marked "Con. VII." on the north side, "Con. VI." on the south side, "Lot I." on the west side and the letter "R" on the north, south, east and west sides.

On the iron posts one and seven-eighths inches in diameter and three feet long planted at the northwest angle of the township of Kendrey (northeast angle of the township of Haggart) I marked "Haggart" on the southwest side, "Lot I." on the west side, "Con. XII." and the four "R's" had already been marked on the proper sides.

On the iron post one and seven-eighths inches in diameter and three feet long planted at the southwest angle of the township of Kendrey (southeast angle of the township of Haggart) I marked "Haggart" on the northwest side; Lot I. on the west side; Con. I. and the four "R's" had already

been marked on the proper sides.

On the post one and seven-eighths inches in diameter and three feet long planted at the northwest angle of the township of Sydere (southwest angle of the township of Haggart) I marked "Haggart" on the northeast side, "Con. I." on the north side, the other sides had already been

properly marked.

The township of Haggart is well watered by the Muskego and Poplar Rapids Rivers, the latter which enters the township on lot twenty-eight, concession one, has an average width of one chain and depth of from one to five feet. This river after flowing in a northwesterly direction for about three miles expands into a beautiful sheet of water known as Departure Lake. This lake, which is about three miles long and having an average width of twenty-five chains is the largest in the township, on the lake are five small islands, full descriptions of which will be found in the traverse notes. The river north of Departure Lake has an average width of about ninety links and depth running from a few inches up to six and eight feet, on the river in concessions eleven and twelve is a lake having an area of about one hundred acres, several small rapids are met with, but no water power worthy of note.

The Muskego River which enters the township from the south on lot four, concession one, has an average width of one chain and depth of from two to five feet, this river flows northerly through the first six concessions, then turning easterly leaves the township at concession six, a few small falls and rapids are also met with on this river, but I did not consider them of sufficient importance to make any reservation for water power develop-

ment.

Besides these rivers there are a number of small lakes in various parts of the township, the water in these lakes and rivers is of the very best and clearest, and they contain the usual kinds of fish common to this section of the Province.

The whole township of Haggart may be described as a more or less rolling country timbered with spruce up to eighteen inches in diameter, balm of gilead up to twenty-five inches in diameter, poplar, white birch, balsam and cedar of an average size and quality. The undergrowth consists for the most part of willow and alder while here and there considerable windfall is met with.

Interspersed throughout are swamps covered with spruce and dead tamarack and as a rule grown up with a dense growth of alder, none of these swamps, however, are of any great extent and as their elevation above the waterways is considerable they will admit of very easy drainage.

On the uplands, generally speaking, the soil is of a rich, black loam of from eight to twelve inches in depth, entirely free from stone, with a sub-

soil of clay.

A few outcroppings of rock (Huronian) are met with, particularly on the Muskego River at the various rapids. I found no traces of mineral whatever.

The average magnetic variation is about eight degrees and thirty minutes west of north.

I would consider about fifty-five per cent. of this township suitable for immediate settlement, and there can be no doubt that by a proper drainage of the swamps nearly all the remainder can be made suitable for agriculture.

Several trial lines of the Grand Trunk Pacific Railway (Transcontinental) cross the township, I have shown as nearly as I possibly can the final location, and with the railway built here and the township open to settlers, I would look for a speedy opening up of this section.

Game and fur of the usual kinds, particularly moose, are to be seen in

abundance.

Wild fruit, such as strawberries, raspberries, etc., were plentiful.

Observations for azimuth were taken as often as possible during the progress of the work.

I have the honour to be, Sir, Your obedient servant,

(Signed) J. W. FITZGERALD,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 19.

TOWNSHIP OF KINGSMILL, DISTRICT OF SUDBURY.

WINCHESTER, ONT., 23rd September, 1908.

SIR,—On the 20th day of May, 1908, I was instructed by the Deputy Minister of Lands and Forests to make a survey of the Township of Kingsmill in the District of Sudbury and to prepare a plan and field notes of my survey for transmission to your Department.

I beg to report that pursuant to these instructions I made preparations for an early departure and proceeded northward by canoes from Metagama

Station over the Mettagami route.

We arrived in the Township of Kingsmill on Saturday July 4th, 1908, and commenced work at the southeast corner of the township on Monday, July 6th, where I found the wooden post described in the field notes of O. L. S. Speight. From this point I ran my south boundary due west astronomically, planting a wooden post every forty chains for a distance of six miles.

I then ran my west boundary due north astronomically from my six mile post until it intersected the south boundary of the Township of Mabee, which it did at a point fifty-four links east of the southeast angle of Mabee.

I then divided the township into sections of 640 acres as near as possible, as shown in the accompanying field notes and planted a wooden post, prop-

erly marked, at each intersection. These sections I further sub-divided by planting half-mile wooden posts between the intersections along all the con-

cession'lines.

I planted an iron post one and one-quarter inches in diameter on the side line between lots six and seven at its intersection with the north and south boundaries and the third concession line and also an iron post of the same size at the intersection of the third concession line with the east and west boundaries.

I planted an iron post one and seven-eighths inches in diameter at the

southwest and northwest angles of the township of Kingsmill.

In addition to the regular wooden posts I planted on the south boundary between lots six and seven a one and one-quarter inch iron post marked on the east side, "VI.," on the north side "Con. I.," and on the west side "VII."

On the line between lots six and seven at its intersection with the third concession line, a one and one-quarter inch iron post marked on the south side "Con. III.," on the east side "VI.," on the north side "Con. IV.,"

and on the west side "VII."

On the north boundary between lots six and seven a one and one-quarter inch iron post marked on the south side "Con. VI.," on the east side "VI.," and on the west side "VII."

On the east boundary between concessions three and four a one and one-quarter inch iron post marked on the south side "Con. III.," on the north side "Con. IV.," and on the west side "I."

On the west boundary between concessions three and four a one and onequarter inch iron post marked on the south side "Con. III.," on the east

side "XII.," and on the north side "Con.IV."

At the southwest angle of the township a one and seven-eighths inch iron post marked on the east side "XII." on the northeast side "Kingsmill" on the north side "Con. 1."

At the northwest angle of the township a one and seven-eighths inch iron post marked on the south side "Con. VI.," on the southeast side "Kingsmill," and on the east side "XII."

I found the land level for the most part, particularly the southern_portion becoming slightly rolling towards the north boundary.

The soil of the north and eastern portions is principally clay of good quality, while in the southwest it is inclined to be sandy, particularly in the first and second concessions west of lot seven. A few ridges of very slight elevation were found in the township. These ridges are as a rule not so thickly wooded as the other lands and as a result are generally covered with a variety of berries, especially raspberries of large size and fine quality, which I found in great abundance.

The whole township is covered with spruce of varying sizes up to fourteen inches in diameter. A few much larger trees are found along the White Cariboo Head River.

The ridges are timbered with poplar and balm of gilead of large size with spruce, birch and balsam intermingled.

I found no real muskeg in this township, although there are some areas of very deep moss with small open spruce, particularly on lot nine, concessions one and two and lot five, concessions four and five.

I found no lakes in the township and only one stream of any size, viz., The White Cariboo Head River, which enters the township on lot five and leaves it on lot two. The depth of this river at the time of the survey was

from four to five feet and the width about eighty links. I do not think it could be navigated to any extent even with canoes.

There are many small windfalls, the result of decaying trees, but none

resulting from cyclones or hurricanes.

There are no water powers.

The only rock outcrop is on lot nine in the fifth concession. Here the rock rises up in a mass covering about three acres in extent and reaching a height of about seventy-five feet above its base and probably two hundred feet above the lower lands to the northward. A sample of this rock accompanies this report.

I saw no mineral veins here nor anywhere in the township.

The weather was generally good with a majority of cloudy days, but only occasional showers. One notable electric and rain storm occurred on the evening of July 27th. Frequent soundings of the White Cariboo Head River showed a depth of from four to five feet, but on the morning after this storm the depth was found to be over ten feet.

The magnetic variation was from seven degrees to eight degrees, thirty minutes west, except in the neighbourhood of the rock above mentioned. An observation a short distance north of the rock gave a variation of sixteen

degrees west.

The side line was corrected accordingly and as this observation was taken at an intersection it was also used to verify the bearing of the concession line. Several other observations were taken, some similar to the above and some at Eastern Elongation at different points throughout the township.

The drainage of practically the whole of the Township of Kingsmill is northward into the Township of Mabee and is effected through three main water courses. The eastern and southern portions find an outlet through the White Cariboo Head River, which, although the banks are here much lower than they are farther north, has a rapid current and affords an opportunity for good drainage for the area which it serves.

The central portion of the township north of the second concession has but fair drainage through a somewhat sluggish creek which enters the town-

ship of Mabee on lot No. six.

The western portion is drained by a creek with considerable banks and a fair current in the northern part of the township, but the banks flatten out toward the south and the current is but slight.

I have the honour to be,
Sir,
Your obedient servant,

(Signed) THOS. H. DUNN,

Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 20.

TOWNSHIP OF LAIDLAW, DISTRICT OF SUDBURY.

WINCHESTER, ONT., November 26th. 1908.

SIR,—On the 20th day of May, 1907, I was instructed by the Deputy Minister of Lands and Forests to proceed to the township of Laidlaw in 6a L.M.

the District of Algoma, now called the District of Sudbury, and make a survey of it by dividing it into lots of 320 acres each.

I commenced the survey at the southwest corner of the township of Mabee, at an iron post one and seven-eighths inches in diameter planted by me and marked "XII." on the east side, "Mabee" on the northeast side, "Con. I." on the north side, "Laidlaw" on the northwest and "I" on the west side, and a wooden post also planted by me and marked the same as the iron post. From this point I ran the south boundary line of Laidlaw township, west astronomically to its intersection with O. L. S. Speight's first meridian line at a point twenty-three links north of O. L. S. Speight's six mile post.

As I had already run the east boundary of Laidlaw as the west boundary of the township of Mabee, I next ran the first and second concession lines and the side lines between lots two and three, four and five, six and seven,

etc., continuing them as far north as the third concession line.

On the 18th day of September, 1907, we moved our camp west along the first concession line to the side line between lots four and five, where we discovered a lake about one and a half miles long and half a mile wide, extending in a north and south direction through concession two and part of concession one. We camped on the bank of this lake, which I have called Return Lake, the remainder of the season. The banks are generally about fifteen to twenty feet in height and covered principally with poplar. The water of the lake is very clear. We caught some very large pike and saw a few otter.

I was forced to break camp on October 7th and quit work in Laidlaw township on account of bad weather, the men refusing to remain any longer. I therefore withdrew my camp into Mabee township and, after finishing my work there, returned to civilization, October 28th. We had the pleasure of breaking ice to afford passage for our canoes for a distance of about fifteen miles on our return trip.

I returned to the township of Laidlaw and re-commenced the survey on the 3rd day of August, 1908, under more favourable circumstances. I completed the survey and withdrew from the township on the 18th day of

August, 1908.

I found several lakes, mostly of small size scattered throughout the township. There is an excellent trail running in a north and south direction through lot four. This trail was most likely made late in the fall of 1907, as I saw no signs of it when working in the township last year. It is very recent and had evidently been used for packing, as it is opened up wide and all obstructions have been removed and streams bridged with logs. It joins the several lakes in lot four.

The soil of the township is clay of good quality except in the extreme southwest corner, where it is sandy. The surface is somewhat rolling, especially in the neighbourhood of the lakes and there is a large muskeg on lots one and two in concessions one and two and on lots ten and eleven in concessions

five and six.

The timber is chiefly spruce, but the higher ground is covered with poplar, balm of gilead, birch and balsam. These poplar ridges are very num-

erous over the whole of the township.

There is a small island in Return Lake which has a very few white pine growing on it and near the south end of the same lake there are a few Norway pine. In the extreme southwest corner of the township the principal timber is jack pine.

I found no rock outcrops and no minerals of any kind.

I took several observations mostly on Polaris at greatest Eastern Elongation and found the reading of the magnetic needle to range from six and one-half to nine degrees west of the true north.

In addition to the regular wooden posts planted each half-mile along the concession lines and south boundary I planted iron posts supplied by

the Department, as follows:—

One, one and one-quarter inch iron post on the south boundary between lots six and seven marked "VI." on the east side, "Con. I." on the north side, and "VII." on the west side, one, one and seven-eighths inch iron post at the southwest angle of the township marked "XII." on the east side, "Laidlaw" on the northeast side and "Con. I." on the north side, one, one and one-quarter inch iron post where the line between lots six and seven intersects the line between concessions three and four marked on the south side "Con. III.," on the east side "VI.," on the north side "Con. IV.," and on the west side "VII.," one, one and one-quarter inch iron post on the west boundary at the line between concessions three and four, marked on the south side "Con. III.," on the east side "XII.," and on the north side "Con. IV.," one, one and one-quarter inch iron post at the intersection of the line between lots six and seven with the centre line of the road allowance along the north boundary of the township, marked "R" on the north and south sides, "VI." on the east side and "VII." on the west side. No iron post was planted on the third concession line at the east boundary as this post and a canoe were taken from my cache during my absence from the township. There is, however, an iron post sixteen links north of this point, which belongs to the township of Mabee.

The one and seven-eighths inch iron posts planted last year at the northeast and southeast angles of the township of Laidlaw while surveying the township of Mabee and described in the notes on that township, were marked with the word "Laidlaw" on the southwest and northwest sides respectively. I also found a one and seven-eighths inch iron post at the northwest angle of Laidlaw township which I marked with the word

"Laidlaw" on the southeast side.

The weather was generally fine throughout the season of 1908.

Nearly the whole drainage of the township is northward through the west branch of the Muskego, which is quite small, being about forty links wide in the south of the township and seventy links wide in the north and from three to four feet deep. This stream leaves the township on lot four and enters the township of Sydere. A portion of the southeast corner of Laidlaw drains into Mabee township, lot twelve drains west and the northwest portion, which is comparatively low except for a few poplar ridges drains but very poorly to the northward and crosses the north boundary on lot nine.

The lakes all drain by small streams to the west branch of the Muskego River, except Boundary Lake, for which there is no apparent inlet or outlet, The banks of this lake are perfectly flat and in this respect it differs from most of the other lakes in this township.

I have the honour to be, Sir, Your obedient servant,

> (Signed) Thos. H. Dunn, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines.

Toronto.

Appendix No. 21.

TOWNSHIP OF JESSOP, DISTRICT OF SUDBURY.

SUDBURY, ONT., April 11th, 1908.

SIR,—I have the honour to submit the following report of the survey of the township of Jessop, in the District of Sudbury, performed under

instructions from your Department dated July 10th, 1907.

I proceeded to the work July 22nd, 1907, by the way of Mattagami Station on the main line of the Canadian Pacific Railway, thence by the usual canoe route down the Mattagami River, arriving at O. L. S. Niven's second base line on August 1st. The township of Jessop is bounded on the south by O. L. S. Niven's second base line run in 1905 and by the township of Mountjoy, being surveyed by O. L. S. Green this season, on the west by the township of Jamieson, being surveyed by the writer this season, on the north by the township of Kidd and on the east by O. L. S. Speight's meridian, run in 1903, and by the township of Murphy.

The survey of the township was commenced on August 3rd as per instructions, by running west astronomically from the several mile posts planted by O. L. S. Speight on his meridian forming the east bondary. Posts were planted on the south boundary at the end of forty chains in each mile to mark the width of lots not otherwise marked by mile posts. Our chainage practically agreeing with that of O. L. S. Niven's on his base line in every mile, his mile posts were adopted as the starting points for our several meridians run due north from the base line. In the second week at this work I was compelled to abandon it on account of my men refusing to work owing to the low and wet nature of the ground due to incessant rains and proceeded to subdivide Jamieson to the west. On September 23rd, after completing the survey of the township of Jamieson a second attempt was made to complete this survey, but after three days I was compelled to again abandon the work owing to men quitting, and return to Sudbury, leaving the work only partly done.

On January 26th, 1908, I left McDougall's Chutes with my party to make a third attempt to complete the survey, going in by way of Driftwood City, along the right of way of the Temiskaming and Northern Ontario Railway and the third concession road (which is cut out and being used) of Walker, Clergue and Dundonald townships to Frederick House Lake. Thence south over this lake and Night Hawk Lake to the Night Hawk Lake Mining Company's camp on Gold Island. From here we proceeded with sleighs and toboggans up the Porcupine River and across the portage route to Mattagami River, arriving in Jessop township on February 1st, when the survey commenced in August was continued and was completed on February 21st, 1908, under more favourable conditions, there being only about fifteen to eighteen inches of snow on the ground and only about four inches of snowfall during our three weeks' residence there. At the southeast angle of the township I found an iron post of one and seven-eighths inches in diameter, marked "VIM" on the south side, "Murphy" on the northeast, "Tisdale" on the southeast, on which I marked with a cold chisel "Jessop" on the northwest, "Con. 1," on the north and "1" on the west, a wooden post found beside it was similarly marked except for the words "Jessop, Murphy and Tisdale."

On the south boundary was found a one and one-quarter inch iron post marked "111M" on the east side, on which I marked with a cold chisel "VI"

on the east, "VII" on the west, "Con. 1" on the north side. A wooden post planted beside it was similarly marked. On the south boundary at the end of six miles was found a one and seven-eighths inch iron post marked "VIM" on the east side, on which I marked with a cold chisel "Jessop" on the northeast, "Jamieson" on the northwest, "Con. I on the north, "I." on the west and "XII" on the east. A wooden post found beside is was similarly marked except for the words "Jessop and Jamieson." On the east boundary was found a one and one-quarter inch iron post marked "1XM on the south side, on which I marked with a cold chisel "Con. IV" on the north," Con. 111" on the south and "1" on the west. A wooden post similarly marked was

planted beside it.

At the front of concession four between lots six and seven I planted an iron post of one and one-quarter inches diameter, on which I marked with a cold chisel "Con. IV" on the north, "Con. 111" on the south, "VI" on the east and "VII" on the west. A wooden post similarly marked was planted beside it. Where concession four intersected the west boundary run in August, 1907, by the writer, I planted a one and one-quarter inch iron post on which I marked with a cold chisel "Con. IV" on the north, "Con. 111" on the south, "XII" on the east and "1" on the west. A wooden post similarly marked was planted beside it. At the northeast angle of the township was found a one and seven-eighths inch iron post, on which was marked "XII M" and "Con. V1" on the south, "Con. 1" on the north, "Murphy" on the southeast, "Wark" on the northeast, "Kidd" on the northwest and "1" on the west, on which I marked with a cold chisel "Jessop" on the southwest. A wooden post found beside it was similarly marked except for the words "Jessop, Kidd, Wark, and Murphy."

On the north boundary where our lines between lots six and seven intersected it, I planted a one and one-quarter inch iron post on which I marked with a cold chisel "Con. VI." on the south, "VI." on the east and "VII." on the west. A wooden post similarly marked was planted beside it, and distance to O. L. S. Holcroft's post noted. At the northwest angle of the township was found a one and seven-eighths inch iron post planted by the writer in August, 1907, marked "Con. VI." on the south, XII." on the east and "I." on the west, "Jessop" on the southeast and "Jamieson" on the southwest. A wooden post planted beside it was similarly marked except

for the words "Jessop and Jamieson."

All iron posts were tubing, three feet in length forged at the top, pointed

at the bottom and painted red.

The wooden posts planted between lots two and three, four and five, six and seven, eight and nine, ten and eleven on the different concessions were marked according to the concessions and lots to which they referred, that is on four sides, with the exception of those on the north and south boundaries, which were not marked on the north and south sides respectively.

The wooden posts planted on the concessions between lots one and two, three and four, five and six, seven and eight, nine and ten, eleven and twelve were marked on three sides only, that is on the north, east and west sides. No trouble was experienced in planting the posts in the winter, there being only four to six inches of frost in the ground. Bearing trees at a convenient distance were carefully marked and noted for each post planted.

The distances along the north boundary from our posts to those planted by O. L. S. Holcroft for Kidd township and along the west boundary to those planted by the writer for Jamieson township were chained and noted in each case, also along the south boundary to those planted by O. L. S.

Green for Mountjoy.

Observations on Polaris at Elongation for azimuth were taken at convenient intervals.

The magnetic variation was found to be fairly constant at eight degrees

west.

All lines were well opened up and blazed and were run with transit.

GENERAL FEATURES.

The township is situated on the verge of the clay belt and is practically level except for a few gulleys cut by creeks in the south end in lots five, six,

seven, and eight, concession one.

A considerable area of muskeg was met with, both in the east and west sides of the township as well as some smaller areas near the centre as shown in accompanying timber plan, these muskegs being moss covered to a considerable depth.

Soil.

The soil for the most part was found to be clay loam, with the exception of a small area in lots five and six at the north end of concession two, and south and north ends of concession three, where sand, gravel and boulders were found. I would consider not more than forty per cent. of the area suited to agriculture.

ROCK.

Rock was only evident in lot five, concession two in form of large boulders, and in lot six on the south boundary in place, being in both cases of dark slate and diabase.

No indications of economic minerals were found.

TIMBER. -

The township is fairly well timbered throughout, with large white spruce, black spruce, up to six inches diameter, balsam up to sixteen inches in diameter on lot four, concession one, balm of gilead, poplar, white birch and some cedar to eight inches diameter and considerable dead tam-

arac, as well as some green tamarac.

All timber seemed to become larger in size approaching the south end of the township where on the base line occurred banksian pine up to eighteen inches diameter. The areas of muskeg were grown with small scattered black scrubby spruce two and three to four inches diameter. About sixty per cent. of the township was thickly grown with tag alders and other small scrubs making progress difficult.

WATER.

Numerous small creeks were found throughout the township, but for the most part were slow and sluggish owing to the flat nature of the ground.

The only creek navigable for canoes being in the southeastern part of the township, it being much swollen in summer due to continual rain.

GAME.

Game seemed plentiful, especially in the winter, moose and caribou being numerous as well as some fur bearing animals, as martin.

Partridge were also plentiful.

Accompanying this report are general plan, timber plan, field notes and account. I have the honour to be Sir,

Your obedient servant,

(Signed) J. H. Burd,

Ontario Land Surveyor.

The Honourable,

The Minister of Lands, Forests and Mines,

Appendix No. 22.

TOWNSHIP OF MOUNTJOY, DISTRICT OF SUDBURY.

TORONTO, ONT., April 21st, 1908.

SIR,—I have the honour to submit the following report of the survey of the township of Mountjoy in the District of Sudbury.

On the 16th of July last, I was instructed to proceed with as little delay as possible to the townships of Mountjoy and Godfrey for the purpose of subdividing the same into lots of 320 acres each.

I engaged a small party in Ottawa and purchased my provisions in Sudbury and started north from Metagami station on the Canadian Pacific Railway, on the morning of the 24th July, and reached O.L.S. Niven's first base line on the 8th of August, following.

Having taken observations on Polaris at the crossing of the Mattagami River by Niven's base line, I proceeded to retrace the base line and turned the angles for the meridians or side lines for a couple of miles on each side of the river. We then moved camp to a point a little below the mouth of a creek (which we called Mountjoy Creek) and near the Porcupine portage using the canoes on the river for transportation.

This point is very conveniently situated in the southeast quarter of the township; and the retracing of the base line and meridian line forming the eastern boundary of the township were completed from this camp, also the starting of the concession and side lines.

Having performed all the work that could be conveniently done from this point we moved camp up stream to the southern crossing of the said river by the side line between lots eight and nine.

From this camp we completed the southern part of the township and on the same day that we moved camp from here to a point about half a mile above the head of the first rapids of the Sandy portage, we continued the side line between lots eight and nine northwards to the northern crossing of the river by this line.

From this camp the sub-division of the township was completed on the 23rd of October, excepting the traverse of the river which was left until the survey of the township of Godfrey was completed in December, when the traverse was made on the ice and completed on the 23rd December last.

With the exception of the southwestern part through which runs a low ridge of sand, gravel and sandy-loam, this township consists of good agricultural soil of clay loam.

This township is covered with spruce eight inches, balsam six inches, poplar eight inches on knolls, birch, five inches, cedar ten inches along river and some dead tamarac eight inches. Scattered trees of black ash four inches are found along the river. In addition to the foregoing, considerable jackpine, eight inches or banksian pine is found in the southwestern or sandy portion of the township.

MAGNETIC DECLINATION.

The magnetic declination at the south end of the side line between lots eight and nine in concession one, is west seven degrees forty minutes (12th August, 1907) at the crossing of the Mattagami River by the side line between lots two and three, in concession two it is seven degrees fifteen minutes west (December 2, 1907). At the crossing of the Mattagami River by the side line between lots four and five in concession five it is west eight degrees fifteen minutes (18th December, 1907) and on the western boundary in concession five it is west eight degrees forty-five minutes (12th December, 1907).

The Mattagami River meanders through this township for over fourteen miles, entering near the middle of the south boundary of lot nine, in concession one and running northeasterly to near the centre of lot two, concession two, where it is joined by Mountjoy Creek from the south and then takes a sharp turn to the north for about three and a half miles to the southeast corner of lot four, concession six, when it makes another sharp turn in a general direction a little south of west crossing the west boundary of the

township between concessions four and five.

The river through this township, excepting the last two and a half miles, is a beautiful stretch of water from three to four chains wide about

ten feet deep with an average current of about two miles an hour.

About two and a half miles from the west boundary the current of the river gets quite rapid and about a quarter of a mile farther down stream we reach the head of the first portage just below the mouth of a small creek entering the river from the south. This portage is the longest of the three portages (known as Sandy portages) being about a quarter of a mile long.

There is no definite drop or fall in the river along this portage, but the river is wide, shallow and rocky, and having a fall of ten feet in this distance, the current is very rapid and it is dangerous to run excepting

with lightly loaded canoes.

About three-quarters of a mile below this we come to the second portage, also situated on the left limit of the river. This portage is a few chains shorter than the first and the river along it has two distinct falls as well as a heavy grade in the river itself, making the difference in elevation forty feet.

About half a mile below this second portage the third and last portage of the so called Sandy portages is met on the right limit of the river. It is a short easy portage of about one-eighth of a mile long. The river along this portage consists of four separate and distinct drops or falls of seven, five, eight and four feet and the different small river stretches adding about six feet more, making a total of nearly thirty feet difference in elevation between the ends of the portage.

I estimate that there are 50,000 cubic feet of water per minute flowing here at low water, and at ordinary water level there would be double that quantity. For safety and convenience of calculation we will assume that there are 45,000 cubic feet of water, with a net available fall of twenty

feet (which allows ten feet for grade of aqueduct and tail race). With this amount of water and fall available, approximately, one thousand four hundred and forty (1,440) horse power can be generated. At the middle portage, with an available fall of thirty feet approximately, two thousand

one hundred and sixty (2,160) horse power can be generated.

The upper or eastern rapids will probably never be used for power purposes until all the available power generated by the middle and lower rapids and falls have been absorbed. Should the upper rapids ever be required for power purposes, the intake of the canal or flume would probably be near the northeast corner of lot eight, in concession five. Hence, in order to permit all the available water power to be used here, I beg to recommend the reservation of the following parcels of land:—

(a) The north quarter of lot eight. (b) The north half of lot nine. (c) The whole of lot ten. (d) The south half of lot eleven. (e) The south half of lot twelve, all in concession five; and in concession four, (f) The north quarter of lot ten. (g) The north half of lot eleven,

and (h) the north half of lot twelve.

No mineral bearing rock was observed in this township.

The following is the record of iron posts to be found in and around

this township.

- 1. At the southeast corner of the township was found an iron post one are one-quarter inches in diameter, alongside the wooden post marked "XII M" on the east side and "Tisdale, Lot. 1, Con. 1" on the northeast side. This iron post was marked by me "Mountjoy, Lot 1, Con. 1" on the northwest side.
- 2. On the base line on the south boundary between lots six and seven was found an iron post one and one-quarter inches in diameter marked "XVM." alongside a wooden post. This iron post was marked by me "VI." on the east side, "VII" on the west side, and "Con. 1" on the north side.
- 3. An iron post one and one-quarter inches in diameter was found alongside the wooden post marking the southeast corner of the township, marked "XVIII M" on the east side and which we marked "Con. 1" on the north side, and "Mountjoy, Lot XII" on the northwest side.
- 4. On the eastern boundary of the township alongside the wooden post marking the point between concessions three and four was found an iron post one and one-quarter inches in diameter, marked "III M" on the south side and which we marked "Lot 1" on the west side, "Con. III" on the southwest side, and "Con. IV" on the northwest side.
- 5. One link south of the wooden post marking the intersection of the concession line between concessions three and four and the side line between lots six and seven is an iron post one and one-quarter inches in diameter marked "Con. III" on the south side, "Con. IV" on the north side, "Lot 6" on the east side, and "Lot 7" on the west side.
- 6. On the west boundary of the township and at a point one link east of the wooden post marking the intersection of the said boundary and the concession line between concessions three and four is planted an iron post marked "Con. III" on the southeast side, "Con. IV" on the northeast side, and Lot XII" on the east side. An iron post one and one-quarter inches marked "Con. III" on the southwest side, "Con. IV" on the northwest side and "Lot 1" on the west side is planted 2.08 chains south of this corner for the township of Godfrey.
- 7. An iron post one and one-quarter inches was found alongside the wooden post marking the northeast corner of the township and marked "Murphy XII.I" on the northeast side, "Tisdale XII.VI" on the southeast

side, "Jessop 1.1" on the northwest side, and we marked it "Mountjoy 1.VI" on the southwest side.

8. An iron post one and one-quarter inches in diameter was placed one link south of the wooden post marking the intersection of the side line between lots six and seven and the north boundary of the township.

This iron post was marked "Con. VI" on the south side, "Lot VI" on the east side and "Lot VII" on the west side.

An old iron post was found on the said north boundary of the township

alongside a wooden post at a point 4.2 links east of said intersection.

9. An iron post one and seven-eighths inches was placed one link south of the wooden post marking the northwest corner of the township and marked "Godfrey" on the southwest side, "Mountjoy" on the southeast side, "Lot 1" on the west side, "Lot XII" on the east side and "Con. VI" on the south side.

> I have the honour to be, Sir,

Your obedient servant,

(Sgd.) T. D. GREEN, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 23.

TOWNSHIP OF GODFREY, DISTRICT OF SUDBURY.

TORONTO, ONT., March 18th, 1908.

SIR,—I have the honour to submit the following report of the survey of the township of Godfrey, in the District of Sudbury.

The subdivision of this township was begun on the 4th of November,

and completed on the 21st. December, 1907.

The ground was frozen to a depth of a few inches and the lakes were all frozen over early in November, but the Mattagami River did not freeze until near the end of the same month.

All crossings and traverses were performed on the ice which facilitated

matters considerably.

For descriptive purposes this township may be divided into three parts running north and south: viz.: the eastern, central and western.

(a) The eastern part consists of lots one, two and part of lot three, from

the south boundary as far north as the Mattagami River.

The surface is rolling and is well drained by the Waterhen Creek and a number of small tributaries.

The soil is mostly too light for agricultural purposes, running from

sand to sandy loam.

It is thickly covered with spruce, four inches to ten inches, balsam four inches to eight inches, throughout: poplar four inches to ten inches and birch three inches to seven inches on the knolls, jackpine four inches to ten inches (banksian pine) on the sandy portions and cedar three inches to nine inches along the Mattagami River.

(b) The central portion consists of lots three (part), four, five, six, seven, and part of eight, and those parts of lots one and two north of the Mattagami River.

The surface is mostly level although there are numerous portions of it

that are slightly rolling.

With the exception of that in the immediate vicinity of the said Mattagami River and small portions of the southern part of the township the soil is generally a clay loam and is excellent for agricultural purposes.

It is thickly covered with spruce four inches to ten inches, balsam four inches to eight inches, throughout, with poplar four inches to twelve inches and birch three inches to seven inches, on the knolls, and cedars three inches to nine inches in the swampy portions.

(c) The western division consists of lots eight (part of), nine, ten,

eleven and twelve.

The surface is rolling and rocky and is interspersed with small areas of

good clay loam.

The timber generally consists of spruce, balsam and poplar, with considerable jackpine near the rocky portions and cedar in the swamps near the lakes.

A few straggling trees of white pine were seen in the western portion of the township.

The ground was all covered with snow and I found no trace of minerals of any commercial value.

The following is the record of iron posts to be found in and around

this township: --

- 1. At the southeast corner of the township was found an iron post one and one-quarter inches in diameter marked "XVIII M," alongside the wooden post. This iron post was marked by me "Godfrey 1" on the northwest side, "Mountjoy XII" on the northeast side and "Con. 1" on the north side.
- 2. On the base line on the south boundary between lots six and seven was found an iron post one and one-quarter inches in diameter marked "XXI M" alongside a wooden post. This iron post was marked by me "VI" on the east side, "VII" on the west side, and Con. 1" on the north side.
- 3. An iron post one and seven-eighths inches in diameter was placed one link east of the wooden post marking the southwest corner of the township and marked "Con. 1" on the north side, and "Godfrey Lot XII" on the northeast side. At a point 1.16 chains east of this iron post was found an iron post one and one-quarter inches alongside a wooden post, marked "XXIV M" on the east side.
- 4. On the eastern boundary of the township at a point one link south of the wooden post marking the point between concessions three and four, is an iron post one and one-quarter inches in diameter, marked "Lot 1" on the west side, "Con. III" on the southwest side, and "Con. IV" on the northwest side.
- 5. One link south of the wooden post marking the intersection of the concession line between concessions three and four and the side line between lots six and seven is an iron post one and one-quarter inches in diameter and marked "Con. III" on south side, "Con. IV" on north side, "Lot 6" on east side, and "Lot 7" on west side.
- 6. On the west boundary of the township and at a point one link north of the wooden post marking the intersection of the said boundary and the concession line between concessions three and four is planted an iron post marked "Con. III" on the southeast side, "Con. IV" on the northeast side,

and "Lot XII" on the east side. An iron post one and one-quarter inches in diameter marked "III M" on the south side was found at a point 1.99

chains north of the iron post planted by me.

7. An iron post one and seven-eighths inches in diameter was placed one link south of the wooden post marking the northeast corner of the township and marked "Godfrey" on the southwest side, "Mountjoy" on the southeast side, "Lot I." on the southwest side, "Lot XII." on the southeast side and "Con. VI." on the south side. An old iron post one and one-quarter inches in diameter alongside a wooden post was found sixty-three links west of this corner marking the southwest corner of the township of Jessop and the southeast corner of the township of Jamieson.

8. An iron post one and one-quarter inches in diameter was placed one link south of the wooden post marking the intersection of the side line between lots six and seven and the north boundary of the township.

This iron post was marked "Con. VI" on the south side and "Lot VII"

on the west side, and "Lot VI" on the east side.

An old iron post was found on the said north boundary of the township alongside a wooden post at a point 1.81 chains west of said intersection.

9. An old iron post one and one-quarter inches in diameter was found at the northwest corner of the township marked "XII M" on the east side, "Jamieson, Lot 1, Con. 1" on the northeast side.

We marked this "Godfrey, Lot XII, Con. VI" on the southeast side.

RECORD OF MAGNETIC DECLINATIONS OBSERVED.

At the southeast corner of lot 1, Con. 1, 4th Nov. 1907—7 deg. 15 minutes W. Between lots eight and nine, Con. 1, 7 Nov., 1907—7 deg. 30 minutes, W. Between lots two and three, Con. IV, 24 Nov., 1907—8 deg. 15 minutes, W. East boundary, lot 1, Con. V., 12 Dec., 1907—8 deg., 45 minutes, W. Between lots eight and nine, Con. V., 10 Dec., 1907—8 deg. 15 minutes, W.

I have the honour to be, Sir,
Your obedient servant,

(Sgd.) T. D. GREEN,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 24.

TOWNSHIP OF MABEE, DISTRICT OF SUDBURY.

WINCHESTER, ONTARIO, May 21st, 1908.

SIR,—In May, 1907, I was instructed to make a survey of the township of Mabee, in the District of Sudbury, and proceeded to the site of the work by way of the Mattagami River route.

I attempted to enter the township by ascending the White Caribou Head River, but found the stream so blocked by log jams that, after very hard work cutting out the logs, we were only able to navigate it for a distance of about one mile. We therefore abandoned the river and moved our camp overland.

I commenced the survey at the south-east corner of the township and ran the south boundary of both the townships of Mabee and Laidlaw, planting a post every forty chains, to its intersection with O. L. S. Speight's first meridian line, a distance of twelve miles and ninety three links. This intersection was found to be twenty-three links north of O. L. S. Speight's sixmile post.

Î ran concession lines west astronomically and the section lines north astronomically planting posts at the intersection of these lines and also posts

on the concession lines forty chains west of each intersection.

The half-mile posts were marked with the number of the lot on the east and west sides and with the number of the concession on the north side while the mile posts or those placed at the intersections were marked with the number of the lot on the east and west sides and with the number of the concession on the north and south sides. I planted a post at each intersection on the north boundary and then measured south fifty links and planted another post, the first forming the centre line and the second post the south limit of a road allowance.

In addition to the regular wooden posts, I planted iron posts as follows: One at the south-west angle of the township one and seven-eighths inches in diameter, marked "Mabee" on the northeast, "Laidlaw" on the northwest, "Con. I." on the north, "XII." on the east, and "I." on the west; also one at the north-west angle of the township, one and seven-eighths inches in diameter, marked "Mabee" on the southeast, "Laidlaw" on the southwest, "R" on the north, "R" on the south. I planted an iron post one and one-quarter inches in diameter at the intersection of the line between lots six and seven with the south boundary, and marked it "Con. I." on the north, "VI." on the east, and "VII." on the west; also one of the same dimensions at the intersection of the line between lots six and seven with the line between concessions three and four and marked "Con. IV." on the north, "Con. III." on the south, "VI." on the east and "VII." on the west; also one of a similar size at the intersection of the line between lots six and seven with the south limit of the road allowance forming the north boundary of the township and marked "R" on the north, "Con. VI." on the south, "VI." on the east and "VII." on the west; also a similar iron post at the intersection of the line between concessions three and four with the west boundary of the township, and marked on the north "Con. IV.", on the south "Con. III.", and on the east "XII." I also marked the iron post, planted by O. L. S. Speight at the south-east angle of the township, with "Mabee" on the northwest, "Con. I." on the north, and "I." on the west. The post planted by O. L. S. Speight at the north-west angle of the township I marked "Mabee' on the southwest, "R" on the north and "R" on the south.

The Mattagami River enters the township of Mabee from the east and in the third concession, and keeping along the east boundary, leaves the township and enters again in the fourth concession. It finally leaves the township at the intersection of the line between concessions five and six with the east boundary. This river is here about six to seven chains wide and is deep with little current. There is no beach, the inner banks descending sharply, in many cases vertically, to the water, making a rather bad landing for canoes. The land rises up from the river to a height of about seventy-

five feet and is inclined to be rolling in the immediate vicinity of the river, but the balance of the township is for the most part level. The land is of a good quality of clay, showing some tendency to gravel on the poplar ridges,

and is overlaid with muck in certain swampy sections.

I found the upper waters of the Muskego River extending completely through the township from north to south. This is the east branch of the Muskego and is here quite small, being generally about eighty links wide. It is navigable for canoes in the second, third and fourth concessions, but south of the second concession it is blocked with alders, and north of the fourth concession are rapids and log jams. No lakes of any size were found in the township.

The timber consists chiefly of spruce, balsam, poplar, balm of gilead and birch, with some rather poor cedar. It is not heavily timbered, but there is no brule and with the exception of a few small poplar ridges, spruce is found in varying size and quality over the whole township. Much tamarac is standing over a considerable portion of the township, but it is all dead, and in many places the ground is covered with fallen tamarac. There are

some large spruce, particularly along the streams.

There are no outcrops of rock in the township and we saw no minerals of any kind. The rapids in the Muskego River are full of boulders, but these

did not appear to carry any minerals.

The streams were swollen by the heavy rains which continued all summer, and I was unable to determine the average summer flow, which would probably be slight in the Muskego and White Caribou Head, which are nothing more than creeks at this point.

There was little opportunity for taking observations as the weather was generally cloudy. I was only able to get four observations on Polaris while

working in the township.

These were taken at elongation on the 20th and 26th of August, the 16th

of September and the 8th of October.

At the beginning of the work I found the variation to be eight degrees forty minutes west, but later on the compass showed nine degrees west. My compasses were all damaged, and finally became useless altogether. It was therefore impossible to get a further determination of the variation.

I have the honour to be, Sir,

Your obedient servant,

(Signed) Thos. H. Dunn, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 25.

PART OF THE TOWNSHIP OF MAISONVILLE, DISTRICT OF NIPISSING.

New Liskeard, Ontario, May 11th, 1908.

SIR,—In accordance with instructions dated January 2nd, 1908, I beg to present my report re the survey of part of the township of Maisonville.

On the evening of January 21st, 1908, I observed on Polaris at the six-mile post on O. L. S. Speight's meridian line and ran east from this point on the following morning

I found that, included in the survey, there was some good agricultural

land, some fair and some not very good.

Lots numbered five in concessions one, two and three are not very good

agricultural land as they are rough and rocky.

The land lying along either side of, and from one-half to three-fourths of a mile from the creek emptying out of Lake Kapakitawewegimok, and the land east, south and west of Twin Lakes is practically good. The land about Lake Sesekinika is somewhat broken, but there are fine valleys of sandy loam soil between somewhat rocky hills.

The remainder of the township surveyed is generally very fair land, excepting an occasional rocky ridge or low flat, and is generally suited for

either agricultural or dairy purposes.

I have the honour to be, Sir,

Your obedient servant,

(Signed) C. H. FULLERTON, Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 26.

PART OF THE TOWNSHIP OF BENOIT, DISTRICT OF NIPISSING.

NEW LISKEARD, ONTARIO, May 1st, 1908.

SIR,—In accordance with instructions dated January 2nd, 1908, re the survey of parts of the townships of Maisonville and Benoit, I herewith beg to present my returns of the township of Benoit.

In addition to the area specified in the instructions, I included in the survey the following:—Lots numbered eleven and twelve in the first and second concessions, lots numbered six and ten in the third concession, and lot numbered six in the fourth, fifth and sixth concessions, or nine lots in all.

I found the land and the timber somewhat better than in the township of Maisonville to the south of it. In the northern portion of the township the timber on the whole is quite large and valuable for pulp wood, and the land is of first-class quality, in fact, almost all the land in this township included in the survey will, I have no doubt, be well suited for agricultural and dairy purposes. There was no red or white pine encountered in this township.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) C. H. Fullerton, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 27.

GILLIES TIMBER BERTH, DISTRICT OF NIPISSING.

NEW LISKEARD, ONTARIO, October 11th, 1908.

Sir,—I beg to report that I have completed the sub-division of the Gillies Timber Berth into mile blocks, according to instructions dated June

2nd, 1908.

The survey was commenced on the 6th of June at the south-west angle of lot two, in the third concession of the township of Coleman, where The east and west lines an observation was taken. were from the easterly limit of the sub-division, except the three southerly lines which were run as follows: - The southerly boundary of Blocks 75, 76, 77, 78 was run east and west from the south-east angle of Block 76, the southerly boundary of Blocks 83, 84 and 85 was run east and west from the south-east angle of Block 84, the southerly boundary of Blocks 90, 91 and 92 was run east and west from the south-east angle of Block 92, the southerly boundary of Blocks 94, 95 and 96 was run east and west from the south-east angle of Block 96, the southerly boundary of Blocks 80, 81 and 82 was run east and west from the south-east angle of Block 82, the southerly boundary of Blocks 88 and 89 was run east and west from the south-east angle of Block 89.

The north and south lines were all run north and south from the line which was produced west from the point of commencement with the exception of the four most westerly lines which were run as follows:—The westerly boundary of Blocks 12, 20, 28, 38, 49, 59, 68, 77, and 85 was run north and south from the south-west angle of Block 12; the westerly boundary of Blocks 39, 50, 60 and 69 was run north and south from the south-west angle of Block 39, the westerly boundary of Blocks 30, 40 and 51 was run north and south from the southwest angle of Block 30, the westerly boundary of

Block 41, was run south from the northwest angle of Block 41.

The east boundary of the sub-division which is part of the west boundary of the township of Lorrain was well opened up, chained, blazed and posted every ten chains.

The north boundary of the sub-division which is the westerly production of the line between concessions three and four in the township of Coleman,

was well opened up, blazed and posted every ten chains.

The northeast boundary of the sub-division which is part of the northeast boundary of the Gillies Timber Berth, was well opened up, blazed and posted where the east and west lines of a ten-chain block would intersect the boundaries.

The northwest boundary of the sub-division, which is also part of the northwest boundary of the Gillies Timber Berth, was well opened up, blazed and posted where the east and west lines of a ten-chain block would intersect the boundaries.

The southwesterly boundary of the sub-division which is also the southwesterly boundary of the Gillies Timber Berth, was well opened up, blazed and posted, where the east and west lines of a ten-chain block would intersect the boundaries.

The southeasterly boundary of Blocks 87 and 79, which is also part of the southeasterly boundary of the Gillies Timber Berth, was well opened up, blazed and posted where the north and south lines of a ten-chain block would intersect the boundaries.

The southeasterly boundary of Blocks 93, 94 and 97, which is also part of the southeasterly boundary of the Gillies Timber Berth, was well opened up, blazed and posted where the east and west lines of a ten-chain block would intersect the boundaries.

At the corner of each block was planted an iron post (a tube) one and one-quarter inches in diameter, three feet long, forged at the top, pointed at the bottom and painted red, which was marked with a cold chisel on the side facing the block with the number thereof. Each iron post was planted beside a wooden post not less than six inches square similarly marked, and where it was possible a cairn of stones was built around the posts.

On the north and south limit of each block were planted wooden posts at the end of each ten chains not less than five inches square and marked on the east side, one, two, three, four, five, six and seven in Roman numerals, being the distance said posts are off the southeast or northeast angle of each regular block.

On the north and south lines similar posts were planted at the end of each ten chains, numbered on the south side of the above.

Posts not less than five inches square were planted at the intersections of all lines with the shores of all lakes and the Montreal River, where the ten-chain posts would have fallen within the lake or river, the same being marked "W.P." on the side facing the point where the post would have fallen, the chainages of which are all given in the field notes.

A careful traverse was made of the Montreal River and of all lakes found within the limits of the sub-division by triangulations and by using carefully adjusted stadia and a graduated rod.

Bearing trees were marked to the posts planted at each angle of the blocks also a bearing tree to the half mile or No. four post on each side of the blocks. Bearing trees were marked "B.T." on the side facing the post.

All lines were well opened up, blazed and posted, the trees being blazed with three blazes each, two in the direction in which the line is running and one on the side on which the line passes.

In running the lines great care was taken to destroy as little timber as possible, and if a line struck a valuable pine tree the same was offset in order to get past it.

The right of way of the Temiskaming and Northern Ontario Railway was located through the limit, also the outlines of the different water power locations and of mining location J. S. 32, and of mill locations J. S. 25 and J. S. 26.

Frequent astronomical observations were made during the course of the survey a few of which are found recorded in the field notes.

The survey of this work on the ground was completed on the 3rd of September, 1908. During the progress of the work sketch plans showing the lines as run with the measurements made on the ground together with all traverses of lakes etc., were given to the Provincial Geologists who accompanied my party.

The magnetic variation was found to be very irregular, and where observed for a whole mile it was very seldom found to be constant.

The blocks were numbered from the east boundary of the subdivision to the west commencing at the northeast angle thereof.

GENERAL FEATURES.

The greater part of the berth is covered with high rocky ridges intercepted by valleys in which there is usually found a lake or a stream of water, the surface being covered with timber and underbrush.

TIMBER.

Large white and red pine originally covered the greater part of this timber berth, the most of which has, however, been cut off, leaving a still very valuable growth of smaller and apparently very healthy red and white pine, spruce, cedar, poplar, etc. There are portions on the northeast and south parts which still contain some exceptionally good large white and red pine. Along some of the ridges were found some valuable large bird's-eye maple and birch. Some fair sized ash trees were met with about the centre of the berth.

Soil.

There seems to be no great depth of soil in any part except in the valleys and on a few clay and sandy ridges. This area is not suited for agricultural purposes except in a few scattered points.

WATER AND WATER POWERS.

The Montreal River flows through the berth from northwest to southeast, the average breadth of which is about two hundred and fifty feet and depth varying from two to forty feet. Its immediate banks rise to an average height of about ten feet above low water, but at a short distance from the shores the hills often rise to an elevation of several hundred feet. There are several water powers on this river, which may be described as follows:

(1) Hound Chute with a natural fall of sixteen feet, (2) Ragged Chutes with a natural fall of thirty-seven feet, (3) Fountain Falls with a natural fall of sixteen feet. There are two rapids known as Red Pine and Long Rapids, both of which are dangerous for canoes. The river is generally considered to be treacherous and many drownings have occurred in its waters.

The discharge of the river at low water is one thousand cubic feet per second.

Numerous small and large lakes were found within the subdivision, the waters of which were clear and apparently good.

MINERALS AND GEOLOGY.

The Provincial Geologist, I believe, is making a complete and exhaustive report on these subjects which will no doubt appear as soon as possible.

GAME.

Moose, red deer, bear, wolves, beavers, foxes, musk-rats and mink were occasionally seen. Pike, bass and trout were found in the Montreal River and in many of the lakes.

FOREST FIRES.

In the early part of July a fierce forest fire raged in the west part of the sub-division adjoining the township of Lorrain, which had apparently orig-

inated in the mining region south of Lorrain. Other small fires occurred at different times the origin of which is doubtful, as several prospectors or hunters were seen at different times during the survey within the subdivision.

I have the honour to be, Sir,

Your obedient servant,

(Signed) JAMES H. SMITH,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 28.

TOWNSHIP OUTLINES IN THE VICINITY OF NIGHT HAWK LAKE, IN THE DISTRICTS OF SUDBURY AND NIPISSING.

Peterborough, Ont., November 25th, 1908.

SIR,—I have the honour to submit the following report on the survey of certain township outlines in the vicinity of Night Hawk Lake in the Districts of Sudbury and Nipissing, surveyed by me under instructions from

your Department dated August 5th, 1908.

As instructed I commenced the survey at the southwest angle of the township of Whitney, and after getting the necessary observations at this point, I ran the west boundary of the township of Shaw due south astronomically six miles planting durable posts at the end of each mile, marking them as instructed. At the end of the sixth mile I procured another observation for azimuth and from this point ran due east astronomically, five miles, seventy-nine chains and sixty-two links, where I intersected the line between the Districts of Sudbury and Nipissing at a point sixty-nine links north of the one hundred and fourteen mile post.

The west and south boundaries of the township of Shaw pass over a rolling country timbered with spruce, birch, cedar, and balsam of average size and quality. Considerable windfall and alder are also met with and although there are some fair flats of land along these lines, for the greater part of the country it is rough and rocky and as a general rule underlaid

with drift boulders.

From what I have seen of the township of Shaw I would consider it

entirely unfit for settlement.

After completing the above work, I proceded to the one hundred and eight mile post on the line between the Districts of Sudbury and Nipissing, and after having taken the necessary observations at this point, I ran east astronomically on six mile chords, the line which marks the southerly limit of the townships of Langmuir, Blackstock and part of Timmins, planting durable posts at the end of each mile marked as per instructions.

At twelve miles, five chains and fifty-two links I intersected O. L. S. Galbraith's meridian line at a point twenty links south of his six mile posts, and at a point three miles, forty-one chains and forty links east of O. L. S. Galbraith's meridian the line terminates at a small lake which forms part of

the Hudson Bay Company's old canoe route between the Montreal River and Night Hawk Lake.

I found the country traversed by the south boundaries of Langmuir, Blackstock and Timmins rough and rocky. The timber consists chiefly of spruce, banksian pine, birch, cedar and balsam up to fourteen inches in diameter and of a fair quality, with willow and alder underbrush and considerable windfall. A few good white pine of about twelve inches in diameter were noticed at about sixty chains east of the District line. Many small clumps of white pine were also noticed around the shores of Night Hawk Lake. A brule of recent date but of small extent occurs on the third and fourth miles of the south boundary of Blackstock and along the last mile of the south boundary of Timmins is a brule of old standing.

Two streams of considerable importance flowing into Night Hawk Lake cross the line, Night Hawk River, on the fourth mile of the south boundary of the township of Langmuir, and White Fish River on the second mile of the south boundary of Blackstock, the average width of these streams is about one chain, while the depth varies from a few inches to many feet.

Along this whole line very little agricultural land is seen and I am sorry to report that from my observations I consider the townships of Langmuir, Blackstock and Timmins entirely unfit for settlement.

While I saw no mineral along the line, I would conclude from the almost constant fluctations of the needle that this locality is fairly rich in magnetic iron.

Many prospectors were met in this locality, some of them had staked several claims and done considerable work. I found, however, that owing to the want of recognized surveys in this vicinity, many of the prospectors were completely at sea with regard to the location of their claims.

I beg respectfully to suggest to your Department the necessity of putting into force some more effective regulations with regard to the starting and putting out of camp fires by prospectors, the great majority of whom are not bushmen.

I was called upon during the summer to extinguish several of these fires in the incipient stage, and after a rather long experience in the bush, I have come to the conclusion, owing to the rich discoveries of mineral that are being made almost daily and to the opening up of this great northern country by the construction of the Temiskaming and Northern Ontario and Grand Trunk Pacific Railways, that nothing short of a regular police patrol of picked bushmen (men selected only with an eye to their fitness for the work) and armed with ample authority, can save this immense forest wealth of the Province.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, TORONTO.

Appendix No. 29.

Addition to the Town Plot of Smyth, District of Nipissing.

NEW LISKEARD, ONT., December 5th, 1908.

SIR,—In accordance with your instructions dated the 5th day of October, 1908, I have made the survey of the addition to the Town Plot of Smyth, and herewith present my report.

I find that while the town plot previously surveyed is an ideal one for a town site, the extension is fully as good, the land is high, level and dry

and on the whole the streets will be quite easy to make.

Portions of the site have been burnt over and comparatively little dif-

ficulty will be experienced in clearing either streets or lots.

I also find that owing to the finding of silver in the locality and also in the vicinity of Miller and Gowganda Lakes, there is a great influx of people in that neighbourhood, many of whom will no doubt remain.

Accompanying herewith is a plan with copy of the survey with field notes and all the other necessary documents duly signed, all of which is

respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

(Signed) C. H. Fullerton, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, TORONTO.

LIST OF LOTS.

All the lots are level and particularly unbroken, except as follows:—372, 373, 156, 157, 158, 159, 226, 225, 224, 223, 231, 222, 232, 233, 234, 235, all crossed by ravine containing small creeks, banks of ravine being about fifteen feet.

187, 267 broken.

269, 270 broken by ravine.

327, 343, 354, 336, 337, all somewhat broken.

277, 276, broken by ravine.

270, 271, 272, have abrupt fronts.

I have the honour to be, Sir,

Your obedient servant,

(Signed) C. H. Fullerton, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, TORONTO.

(Appendix No. 30.)

TOWN PLOT IN THE TOWNSHIP OF BROWER, DISTRICT OF NIPISSING.

NEW LISKEARD, ONT., December 23rd. 1908.

SIR,—In accordance with your instructions dated July 30th, 1908, I have made a survey of a town plot in township lots four and five, in the fourth concession of the township of Brower, on the Abitibi River in the district of Nipissing, where the same is crossed by the National Transcontinental Railway, and herewith present my report.

I have made a plan of the said survey on a scale of two hundred feet to the inch, and have also made a linen copy, both of which I have forwarded

to you.

I have also compiled field notes of the survey and have made a list shewing the character of the lots, I have also made a list of the buildings, with their location, size, approximate value, and the name of the owner or occupant in each case, all of which are herewith presented.

The spot is an ideal one for a town site, the banks of the river are high and the town plot is quite elevated and dry. There is a splendid view up and down the river and it will no doubt be a very suitable place for saw

mills and other mills depending upon the timber products.

For buildings for public purposes, lots nineteen to twenty-seven inclusive, on North Victoria Street would be the most suitable, in my opinion to be reserved, being situated about the centre of the town plot as subdivided, and of a character quite suitable generally for building upon. Lots ten to eighteen inclusive on both sides of Victoria Street would be very suitable for park purposes.

Opposite lots sixteen to twenty-four inclusive on either or both Abitibi

Avenue or River Street would be suitable sites for docks and landings.

I also present oaths of chainbearers, pay list, account and the other documents required.

All of which is respectfully submitted.

I have the honour to be,

Sir.

Your obedient servant,

(Signed) C. H. FULLERTON,

Ontario Land Surveyor.
The Honourable, The Minister of Lands, Forests and Mines,
Toronto.

(Appendix No. 31.)

TOWNSHIP OF BONIS, DISTRICT OF NIPISSING.

Delta, Ont., November 25th, 1908.

SIR,—I have the honour to submit the following report on the survey of the township of Bonis, in the District of Nipissing, in accordance with your instructions, dated the 23rd day of May, A. D. 1908.

This township is bounded on the west by the township of Steele, on the south by the township of Berry, and on the east and north sides by the unsurveyed lands of the Crown. I found that the west boundary of my township had been run this season by O.L.S., Herbert Beatty, and according to his chainage, the southwest corner of this township would be where the line between concessions A and B of the township of Steele intersected his east boundary.

I therefore started from his post between these concessions and established my south boundary by running a chord of latitude due east astronomically a distance of six miles, planting posts every forty chains and mark-

ing them for the respective lots.

From the easterly end of this chord I ran a line due north astronomically to intersection with base lines run by O.L.S. Patten last year, which forms the north boundary of this township.

The subdivision of the township was then performed in accordance with instructions.

The side lines between lots two and three, four and five, six and seven, eight and nine, and between ten and eleven were run due north astronomically from the posts planted on the south boundary, and the concession lines were run east and west astronomically as the work progressed with a depth of eighty chains as near as practicable.

The result being set forth in detail in the field notes. All posts were made from the most durable wood available, marked with a marking iron and firmly planted in the ground.

At the southwest corner I planted an iron bar one and seven-eighths inches in diameter, and as this is also the northwest corner of the township of Berry, I marked it "Con. 1" on the northside, "Bonis" on the northeast, "XII." on the east, "Berry" on the southeast, and "Con VI." on the south side. I also planted a bar one and seven-eights inches in diameter at the southeast corner of the township and it being the northeast corner of the township of Berry, I marked it "Con. VI." on the south side. "Berry" on southwest, "I." on west, "Bonis" on northwest and "Con. 1" at north side, and a similar bar at the northeast corner of the township marked "Con. VI." on south side, "Bonis" on southwest and "I." on the west side, and at the northwest corner I planted another marked "Con. VI." on south, "Bonis" on southeast, and "XII." on east side.

I planted iron bars one and one-quarter inches in diameter at the following places; on the line between lots six and seven at its intersection with the south boundary marked "VI." on east, "Con. I." on north, "VII." on west, and "Con. VI." on south side: at its intersection with line between concessions three and four, marked "Con. III." on south, "VI." on east, "Con. IV." on north and "VII." on west side; and at its intersection with the north boundary marked "Con. VI." on south, "VI." on east, and "VII." on west side; on the line between concessions three and four at its intersection with the east boundary marked "Con. III." on south, "I." on west and "Con. IV." on north side; and at its intersection with west boundary marked "Con. III." on south, "XII." on east, and "Con. IV." on north side.

Observations for azimuth were frequently taken to check bearings of lines, the magnetic variation being about nine and one-half degrees west of the astronomic north.

The National Transcontinental Railway now under construction runs through this township, crossing the east boundary in concession two and the west boundary in concession four, and will assist materially in the future

development of this township.

The surface is fairly level with sufficient fall towards the large creeks to be easily drained, but at present a large part of it is wet and swampy. The soil is a good clay loam, and is well adapted for agricultural purposes.

The only timber of any commercial value is spruce, and it is small in

diameter and only suitable for pulpwood.

No traces of economic minerals were seen and there are no water powers

in this township.

Fish and game are conspicuous only by their absence. At present the spruce pulpwood is the chief asset of this township, but I have no doubt that the construction of the railway will be quickly followed by the establishment of a prosperous farming community.

Accompanying this report are a general plan, timber plan, and field

notes.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) WALTER BEATTY,

Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

(Appendix No. 32.)

TOWNSHIP OF BERRY, DISTRICT OF NIPISSING.

Delta, Ont., November 25th, 1908.

SIR,—I have the honour to submit the following report of the survey of the township of Berry, in the District of Nipissing, performed under your instructions dated the 23rd day of May, 1908.

This township is bounded on the north by the township of Bonis, surveyed by me this summer, on the east and south sides by the unsurveyed lands of the Crown, and on the west by Lower Abitibi Lake and concession A of the township of Steele. Having surveyed the south boundary of Bonis as reported already, I established my east boundary by running a line due south astronomically from the southeast corner of the township of Bonis. I then ran side lines between lots two and three, four and five, six and seven and eight and nine, from posts planted on south boundary of Bonis, due south astronomically, and from these meridians the concessions were run east and west astronomically as the work progressed, so as to make each concession eighty chains in depth approximately, the sub-division being performed in accordance with instructions, and the results shown on plan and in field Posts were planted firmly in the ground, properly marked, at the proper points, the most durable wood available being used. Sufficient observations for azimuth were taken to check bearings of lines, the magnetic variation being about nine and one-half degrees west of the true meridian.

The iron posts planted on the south boundary of Bonis suited for the adjacent corners on the north boundary of this township, and I have already reported them in my returns for the former township.

I planted iron bars one and seven-eighths inches in diameter at the southeast and southwest corners of the township. the former being marked "Con. I." on the north, "Berry" on the northwest and "I." on the west side, the latter marked "X." on the east, "Berry" on northeast and "Con. I." on north side. I planted iron bars one and one-quarter inches in diameter at the following places, at the intersection of line between lots six and seven with the south boundary, marked "VI." on east, "Con. I." on north and "VII." on west side; and on the line between concessions three and four at its intersection with the east boundary marked "Con. III." on south, "I." on west, and "Con. IV." on north side; at its intersection with line between lots six and seven marked "VI." on east, "Con. IV." on north, "VII." on west and "Con. III." on south side; and at its intersection with shore line of Lake Abitibi marked "Lot VIII., Con. IV." on north side and "Lot IX., Con. III." on south side.

The surface of the township is level or gently undulating, excepting a strip from half a mile to a mile in depth along Lake Abitibi, through concessions one, two, three, and four, this strip being rough and broken with occasional outcrops of rock.

Aylen River crosses the north boundary near the middle of lot three, and flows in a southwesterly direction into Lake Abitibi. It is a very sluggish stream after the spring floods run off, and is navigable by canoes until on in September, when the water in the lake begins to get pretty low. There are only four small lakes in this township and a few small ponds, and that part of the township lying east of line between lots four and five is very level and swampy, the timber being mostly small spruce. The only timber of commercial value is spruce suitable for pulpwood. In the hilly portions and along the banks of the creeks the timber is spruce, balsam, and poplar with scattered white birch and banksian pine, all averaging from six to twelve inches in diameter.

The soil is good clay loam and will be easily cleared for agricultural purposes, and owing to the National Trans-continental Railway passing a couple of miles to the north of this township it should soon be settled and cleared.

Fish and game are very scarce, the only portion of the township in which evidence of presence of moose was noted, was around a small lake in the southwest corner of the township.

Accompanying this report are a general plan, timber plan, and field notes.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) WALTER BEATTY,
Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto. (Appendix No. 33.)

TOWNSHIP OF STEELE, DISTRICT OF NIPISSING.

Eganville, Ont., December 3rd, 1908.

SIR,—I have the honour to report that in accordance with your instructions dated the 29th day of May. 1908. I have completed the survey of the township of Steele in the District of Nipissing.

This township is bounded on the south by Lower Abitibi Lake, on the east by the township of Bonis and the unsurveyed lands of the Crown; on the north by unsurveyed lands, and on the west by unsurveyed lands and the

township of Purvis.

The base line, run by O.L.S. Patten last summer is the front of concession one of this township, and his fourth mile post being the most convenient point to reach from Lake Abitibi, I went to it and commenced the subdivision work by running a line south to the lake and north through the various concessions as a base for my work, making the concessions eighty chains in depth and the lots forty chains in width as near as was practicable. The township of Purvis formed the west boundary through concessions D., E., F. and G., and I ran a line due north astronomically from the northeast corner of this township for the remainder of said boundary. The east boundary was run from Patten's six mile post south astronomically to the shore of the lake and north astronomically to intersection with the north boundary. The subdivision of township was carried out in accordance with instructions, the meridians being projected from Patten's base line, south to the lake and north through the township, the concession lines being run east and west astronomically. Posts of the most durable wood available were planted at the corners of the lots, and where ground was rocky and posts could not be well driven into the ground, stones were piled around them.

Frequent observations for azimuth were taken, the magnetic variation

being about nine and three-quarter degrees west.

I planted an iron bar one and seven-eighths inches in diameter at southeast corner of my township marked "I." on west, "Con. A." on north and "Steele" on northwest side. To the one and seven-eighth inch iron bar, beside Patten's six mile post I added "Con. I." on north, "I." on west and "Con. G." on south side. I also planted one and seven-eighth inch iron bars at the northeast and northwest corners of my township, the former marked "Con. VI." on south, "Steele" on southwest and "I." on west side, the latter marked "Con. VI." on south, "Steele" on southeast and "XII." on east side, and I planted a similar bar at the southwest corner of the township, marked "XII." on east. "Steele" on northeast and "Con. D." on north side. This post was planted alongside wooden post planted by O.L.S. Patten last year.

I planted iron bars one and one-quarter inches in diameter at the following places, on the line between lots six and seven, at its intersection with shore line of Abitibi Lake, marked "VI." on east, "VII." on west and "Con. E." on north. at its intersection with line between concessions three and four marked "Con. III." on south, "VI." on east, "Con. IV." on north side and "VII." on west, and at its intersection with north boundary marked "Con. VI." on south, "VI." on east and "VII." on west side; also on line between concessions three and four, at its intersection with east boundary marked "Con. III." on south, "I." on west and "Con. IV." on north, and at its intersection with west boundary, marked "Con. IV." on north, "XII."

on east and "Con. III." on south.

The surface of that part of this township lying north of the line between concessions two and three is rolling and broken as a whole, while some of it is very hilly, and is not of any value for agricultural purposes, the soil being mostly sandy, mixed with stones and rock, and a considerable percentage of

it has been burned over in the last few years.

The timber is small and not of any commercial value, while the remainder of the township is either level or gently undulating, with numerous small creeks which will afford excellent drainage facilities, the soil being a rich clay loam, suitable for agricultural purposes, the timber being spruce suitable for pulpwood, standing very thick but none of it is of large dimensions. along the banks of the larger creeks and on the higher knolls scattered banksian pine and spruce are found from eight to fourteen inches in diameter, but the construction of the railway will require a large percentage of supply of large timber. The majority of the lots have a valuable asset in their supply of spruce pulpwood. Outcrops of rock occur generally speaking in the easterly portion of the township and it appears to have been overrun by prospectors who staked out a number of claims, but all of these seem to have been abandoned with the exceptions of B.G. 189, in Concession C. where men were engaged sinking a shaft this summer. The Bureau of Mines had a party making geological survey on Lake Abitibi this summer and will doubtless report fully on the mineral resources of this township.

The National Trans-continental Railway now under construction runs through this township, and should add materially to the value of the land, as the settlers will by its aid have access to markets for their pulpwood,

thereby more than paving for the cost of clearing their land.

Residency 5 of the Engineering Staff of the railway is located on lot 5, concession E., and the buildings erected there, the partially cleared right of way of the railway and the mining operations on B.G. 189 are the only

evidences of occupation in this township.

There are no navigable streams or water powers, and only three fair sized lakes in this township, but it is well drained by numerous small creeks. The larger portion of the township drains southerly into South East Bay of Lake Abitibi, the remainder draining in a northwesterly direction, with an outlet into the lake through the township of Purvis.

Lake Abitibi which forms the south boundary of the township is very shallow with low shores, and is only navigable by flat bottomed or shallow

vessels.

Game of any kind is very scarce. Indications of the presence of moose were seen round the lake on lots six and seven, concessions five and six, and

occasional tracks along the shore of Lake Abitibi.

Taken as a whole I believe that fifty per cent. of this township is suitable for agricultural purposes, and I have no doubt that the construction of the railway will quickly be followed by settlers, and that that portion of the township south of concession three will develop into a prosperous agricultural community.

Accompanying this report are a general plan, timber plan, field notes,

and the customary affidavits.

I have the honour to be,

Sir.

Your obedient servant,

(Signed) Herbert J. Beatty, Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 34.

Township Outlines in the Temagami Forest Reserve, District of Nipissing.

TORONTO, ONT., November 30th, 1908.

SIR,—I have the honour to submit the following report upon the survey of certain township outlines to the east of the east branch of the Montreal River in the Temagami Forest Reserve, made by me under instructions from your Department, dated the 27th day of May, 1908.

Leaving Latchford on the tenth day of June with my party and outfit I proceeded via the Montreal River to the field and commenced operations in due course. The first meridian line was run due south from a point six miles due west of the northwest angle of the township of Farr and forms the eastern boundary of the townships of Morel, Haultain, Nichol, Charters and Donovan. The second meridian line was run north from a point six miles due west from the southwest angle of the township of Rorke and forms the eastern boundary of the townships of Gamble, Brewster, Corkill, Lawson, Chown and Shillington.

Base lines were run six miles east and six miles west from the northwest angles of the townships of McGiffin and Trethewey, in other cases were produced west from points established last year.

Three of these were produced westerly to the east branch of the Montreal River, as follows:—

The north boundary of the township of Morel intersecting at Sisseney Lake, the north boundary of the township of Nichol at Burk Lake and the south boundary of the township of Donovan at Smooth Water Lake.

From the last mentioned intersection I connected by triangulation across Smooth Water Lake with P. L. S. Sinclair's one mile point on his survey of the east branch of Montreal River made in 1867, where I found an eight inch red pine blazed on four sides and a few feet away on another red pine, the name "D. SINCLAIR, P.L.S." (date) cut in and although somewhat charred by fire since placed there, was still quite distinct, the date alone being indistinct.

Good substantial squared wooden posts were planted at every mile throughout the survey, excepting where such point came within a lake or river, in such cases a witness post was planted at the shore with the proper chainage inscribed thereon. The mile posts were all properly marked with the mileage, numbered from the east and south from 1 M. to 6 M. for each township boundary.

Iron posts one and one-quarter inches in diameter were planted in addition to the wooden posts, at township corners and also at the intersections before mentioned at Smooth Water and Burk Lakes on the east branch of the Montreal River

PHYSICAL FEATURES.

In general the surface of the country traversed is very broken and rough, high hills, with rock surface succeed each other with marked regularity as the country is travelled from east to west. The watershed towards the east branch does not extend more than two miles to the east.

The headwaters of the southwest branch of Bear Creek, Stony Creek and north branch of Lady Evelyn River are situate within the township of

Corkill where a number of small spring lakes and ponds were found.

The largest valley noticed was that through which the east branch flows in a very winding course in the township of Charters and Nichol, being from one to two miles wide. The banks of the stream are of good clay loam. The soil in general throughout the country is sandy with loose rounded boulders, but the country rock is not very deep below the surface, even in the swampy tracts.

TIMBER.

The different kinds of forest trees which are found growing in any quantities are jack or banksian pine, birch, spruce, poplar, balsam, cedar and red and white pine. The fires which swept over that country years ago seem to have burnt in small areas and at different times, especially is this noticeable in the southern part, where small second growth jack pine, birch, poplar, will be found on one ridge, while the next will be covered with the same kind of trees averaging from six to sixteen inches in diameter. In general terms I would describe the forest which has survived the fires within the past semi-centenary as consisting of banksian pine, spruce, poplar, balsam, birch and cedar, averaging from eight to sixteen inches in diameter. Also small bunches of red and white pine in the townships of Charters, Donovan, Gamble, Brewster, Trethewey and McGiffin from ten to thirty inches in diameter. That of more recent growth consists of banksian pine, spruce, balsam, birch and poplar, varying in size up to eight inches and thickly studding the surface.

During the past season a large tract of country was burnt over adjoining Stony Lake, Bloom Lake, Miller Lake, Lost Lake, Gowganda Lake, Obuskong Lake, and along the water routes joining these lakes, and while no great quantity of valuable timber was destroyed, one of the finest and most attractive canoe routes in northern Ontario has been disfigured. No fires occurred to my knowledge during the season south of this one throughout my work.

WATER AND WATER POWERS.

Very few rain falls during the past summer caused the creeks to become very shallow and canoeing on the upper waters of the streams met with was difficult. Old portages were cleaned up where occasion required their use and several new ones were cut out. Big Bear or Macobe Lake is the largest body of water within this season's work, being over eight miles long and three wide.

There are no falls or rapids within the territory attractive for water power development.

ROCK FORMATION.

The northern part of this territory has been investigated closely by the Department of Mines; in the southern portion quartzite extends throughout with here and there small dykes of diabase.

GAME.

A large number of Moose were seen during the work in the Lady Evelyn River country. Also signs of bear, and several instances of fresh beaver work. Wolves were also heard on several occasions within short range of camp.

Not many fish were caught in the lakes or streams, pickerel, pike, bass

and trout being the varieties seen.

Accompanying this report I submit plan, field notes, affidavits and accounts.

I have the honour to be, Sir,
Your obedient servant

(Signed) L. V. RORKE, Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 35.

BASE AND MERIDIAN LINES, DISTRICT OF ALGOMA.

LITTLE CURRENT, ONT., December 22, 1908.

SIR,—I have the honour to submit to you the following report on the survey of base and meridian lines, which form boundaries of timber berths C, D, H, G, K, L, O, P, S and T, each six miles square, on the Mississaga, Sable, and west branch of the Spanish Rivers, in the District of Algoma, under instructions from your Department dated Toronto, May 28th, 1908.

Leaving Little Current on 2nd July, I proceeded by way of the Canadian Pacific Railway to Biscotasing, where I outfitted and procured guides, thence continuing by canoe route to Bark Lake on the Mississaga River in

Berth T, where I arrived on the evening of 11th of July.

On 13th of July I commenced the work by running east astronomically, the first base line from O. L. S. Niven's twelve mile post on his meridian which was run in 1901. The base was run continuously for twenty-four miles and some chains to the fifth mile on the north limit of Berth D, when

further work on it was stopped by bush fire.

The second base was also run east astronomically, continuously from the six mile post on the said meridian run by O. L. S. Niven about thirty miles to its intersection with O. L. S. Beatty's meridian, at a point five chains and twenty-nine links south of where his meridian intersects the south shore of Sinaminda Lake. Reckoning from Beatty's chainage to this lake, this intersection of second base with said Beatty's meridian is nineteen chains and ninety links north of his six mile post. An unsuccessful search was made for this post.

The first, second and third meridians were run south astronomically, from the first base at intervals of six miles (the first meridian starting from the first base at a point six miles east of the said Niven's meridian, the second meridian at a point twelve miles east of the said Niven's meridian, and

so forth) continuously to their intersection with O. L. S. Niven's base. The fourth meridian was also run south astronomically from the first base for two miles and some chains, when we were again driven back by the fire. From near the proper point on the second base due allowance having been made for convergence of meridians. The fourth meridian was then run south astronomically to its intersection with the said base run by O. L. S. Niven. Then from the said point on the second base it was run north astronomically three miles and some chains across Mozhabong Lake, where we again met the fire. Seeing that there was little probability of the fire being put out, we abandoned the work on the 21st of September. All lines were well cut out and blazed on the side of the trees facing the line, also on those sides in the direction in which the lines were running.

At every mile a wooden post six inches square was planted, except in a few instances where large enough timber could not be obtained conveniently, smaller ones were placed. On the base lines the posts were marked in Roman numerals on the east side, the number of miles reckoning from the northeast corner of the berth, and on the meridians the number of miles was marked on the south side reckoning from the southeast corner. At the berth corners an iron tube one and one-quarter inches in diameter, three feet long, pointed and forged at the top to exclude rain, was also planted beside the wooden post. On both these posts were marked the berth letters on the sides facing the respective berths.

Where a mile came in a lake a post was planted on the nearest shore with the miles and chains marked on it.

The timber is mostly jack pine from six to fifteen inches in diameter, while spruce from six to twelve inches, white birch from six to ten inches, balsam from six to twelve inches. In some places there is poplar from four to twelve inches. On the southerly nine miles of the first meridian there is considerable white and red pine of the best quality, and from fifteen to twenty-six and thirty inches in diameter. The south half of Berth O. also the southwest quarter of K. is probably well timbered with white and red pine of the above dimensions. No other large areas of red and white pine were seen, it occurs more or less scattered on the other berths.

On Berths S. and T. there are clumps of red and white pine of fair size and quality which have escaped the fire which swept those berths, also the northwest quarter of P., some years ago. The greater part of the country is heavily timbered, in a few places there is gool sized cedar, but shaky at the butt. Along the north limit of T. considerable cedar was found. In some sections there is a scrubby soft maple. There is also some ash along the streams.

In Berth L. there is a belt of the old brule from one to two miles wide, which extends from near the northwest corner southeasterly through the berth, and projects three square miles into the northeast corner of K. There is also a small belt of it along the first, second and third miles on the line between H. and D. This brule is covered with a dense growth of jack pine, spruce and white birch about three inches thick, which made it very tedious work to cut a line through.

The accompanying timber map shows in colours the distribution of the different timbers and brule.

The rock is all red granite, and the soil a rich, sandy loam, but so badly broken with rock, boulders and gravel as to be unfitted for anything but timber.

There are apparently no minerals.

The country is very hilly and in places mountainous. The hills follow mostly a northerly and southerly course, and are from forty to one hundred

and fifty feet high.

The Mississaga River flows out of Bark Lake near the west limit of T. Near the east limit of O. a considerable stream flows south and empties probably into the Sable waters. It probably could be used for driving timber. The west branch of the Spanish River flows southeasterly through Berths L. H. and G. It has a good current and is from thirty to forty feet wide and from two to three feet deep, and navigable for canoes.

There are a great many lakes which form excellent canoe routes. Bark Lake which extends through a great portion of Berths S. and T. is particularly attractive to the tourist, partly on account of the timber on its shores not being killed by the raising and lowering of its waters in lumbering, which is the case on Mozhabong Lake.

There are a great many moose and red deer, also wolves and a fair amount of smaller game. There is plenty of fish in Bark and Mozhabong Lakes.

The magnetic variation ranged mostly from four degrees to five degrees,

and was very steady.

Great-care was taken to extinguish all fires, and a reliable man was

instructed as his particular duty to see that this was done.

The lines were run with a six inch solar and a transit. Observations for the meridian were taken on Polaris, and the bearing of the solar lines checked.

> I have the honour to be, Sir, Your obedient servant,

> > (Signed) T. J. PATTEN, Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 36.

BASE AND MERIDIAN LINES, DISTRICT OF ALGOMA.

SUDBURY, ONT., November 16th, 1908.

Sir,—I have the honour to submit the following report of the survey of certain base and meridian lines forming the outlines of timber berths six miles square lying between O. L. S. Niven's base line of 1901 on the north and O. L. S. Patten's base line of 1891, and O. L. S. Bell's base line of 1888 on the south in the Mississaga Forest Reserve, District of Algoma, performed under instructions from your Department, dated June 8th, 1908.

I left Sudbury on July 8th, 1908, and proceeded with part of my party to Bisco, on the Canadian Pacific Railway, where my supplies were, leaving the balance of the party at Munro Siding on the same line of railway, further east. After getting the canoes loaded I started my assistant with eight men south on July 11th, by Bisco, Indian and Mozhabong Lakes to the work, going back to Munro Siding and by way of Pogomasing, Kennedy

8 L.M.

and Blue Water Lakes, through the township of Craig to the southwest angle thereof, where we arrived on July 13th. After obtaining the necessary observation the work was started on July 14th, and I ran west astronomically from day to day till the base line was completed on September 3rd.

The survey was performed in accordance with instructions in every particular, with the exception of the marking of posts south of my base line, owing to the difficulty and in some instances impossibility of locating O. L. S. Patten's and O. L. S. Bell's base lines to the south, on account of lumbering operations having destroyed every land mark in the vicinities of The several meridian lines south of my base line were chained from the base south and the posts marked on the north side with the mileage from my base line in each case. Wooden posts of the most durable wood in the vicinity were planted at the end of every mile in a stone mound, wherever stones were obtainable and plainly marked in Roman numerals the number of miles from the starting point or intersection in each case. My fourth meridian was run south astronomically from the twelve mile post on O. L. S. Niven's base line of 1901, crossing my base line at six miles, two chains and sixty-six links west of O. L. S. Salter's third meridian, re-run by O. L. S. Beatty in 1891. An observation on Polaris at East Elongation at this corner proved both lines correct.

My third meridian was run north and south astronomically from a point in my base line six miles west of the fourth meridian. O. L. S. Salter's fourth meridian was intersected at five miles, fifty-seven chains and sixty-three links west of my third meridian and was easily traced out in the green timber. My second meridian was run south astronomically from a point on O. L. S. Niven's base line of 1901, distant twenty-four chains and sixty-three links east of his thirty mile post, crossing my base line at six miles, seven chains and five links west of O. L. S. Salter's fourth meridian.

My first meridian was run north and south astronomically from a point on my base line six miles west of the second meridian.

After diligent search for some time by the whole party it was found impossible to discover any trace of O. L. S. Salter's fifth meridian run in 1857 and I planted the iron and wooden post at the end of my line, six miles and sixty-two chains west of the first meridian and returned to the last corner to run north astronomically. On September 7th the work was completed and we left for Bisco and Sudbury, where we arrived September 10th.

Iron posts one and one-quarter inches in diameter, three feet long, forged at the top, pointed at the bottom end and painted red, and plainly marked with a cold chisel, the mileage and the different berths to which they referred on the proper sides were planted at the following points in a stone mound where stones were obtainable besides a wooden post in each case, viz..

- 1. At the southwest angle of Craig township marked "Craig" on the northeast, "115" on the northwest, "114" on the southwest and "108" on the southeast.
- 2. At the intersection of my base line with O. L. S. Salter's third meridian re-run by O.L.S. Beatty, 1891, marked "VI. M+0.77" on the east side, "114" on the southeast, "115" on the northeast, "A" on the southwest and "B" on the northwest.
- 3. At the intersection of my base line with my fourth meridian marked "VI. M+2.66" on the east side, "A" on the southeast, "B" on the northeast, "E" on the southwest and "F" on the northwest.

4. At the intersection of base line with third meridian marked "VI. M" on the east side, "E" on the southeast, "F" on the northeast, "I" on the

southwest, and "J" on the northwest.

5. At the intersection of my base line with O. L. S. Salter's fourth meridian run in 1857, marked "VM. M+57.63" on the east side, "I" on the southeast, "J" on the northeast, "M" on the southwest and "N" on the northwest.

6. At the intersection of my base line with the second meridian marked "VI. M+7.05" on the east side, "M" on the southeast, "N" on the northeast,

"R" on the northwest and "Q" on the southwest.

7. At the intersection of my base line with the first meridian marked "VI. M" on the east side, "Q" on the southeast, "R" on the northeast, "V" on the northwest and "U" on the southwest.

8. At the end of my base line marked "VI. M+62.00" on the east side,

"V" on the southeast and "U" on the northeast.

9. At the intersection of my fourth meridian with O. L. S. Patten's base line of 1891, marked "VI M+40.00" on the north side, "A" on the northeast, "E" on the northwest.

10. At O. L. S. Niven's base line was found an iron and wooden post marked "XII. M" on the east side, on which I marked on the south side

"VM+61.27," "B" on the southeast, "F" on the southwest.

11. At the intersection of my third meridian with O. L. S. Niven's base line marked "VM+56.00" on the south side, "F" on the southeast and "J" on the southwest.

12. At the intersection of my third meridian with O. L. S. Patten's base line of 1891, marked "VIM+47.46" on the north side, "E" on the

northeast and "I" on the northwest.

13. At the intersection of my second meridian with O. L. S. Niven's base line of 1901, marked "VM+61.88" on the south side, "N" on the southeast, and "R" on the southwest.

14. Near the intersection of my second meridian with O. L. S. Bell's base line of 1888 (no trace of which was to be found) marked "VIM+40.00"

on the north side, "M" on the northeast and "Q" on the northwest.

15. At the intersection of my first meridian with O. L. S. Niven's base line of 1901, marked "VM+64.90" on south side, "R" on the southeast and "V" on the southwest.

16. At the intersection of my first meridian with O. L. S. Bell's base line of 1888, marked "VIM+48.61" on the north side, "Q" on the north-

east, and "U" on the northwest.

Where the end of a mile came in a lake or river, the posts were planted on the nearest bank and chainage marked thereon with a knife. Bearing trees were marked and noted at a convenient distance for every post planted. All lines were run with transit and were well opened out and blazed. Observations on Polaris at Eastern Elongation for azimuth were taken frequently throughout the survey. The magnetic variation was found to be fairly constant at five degrees twenty minutes west. At a point on the first meridian about "VM + 60.00" south of the base line a deflection of eighteen degrees was noted, the country being very rocky and mountainous in the vicinity.

GENERAL DESCRIPTION.

The first twelve miles or so of base line passed through rough, rocky, mountainous country, with large areas of bare rock, apparently burned over thirty-five to forty years ago, and grown up with white birch, poplar, balsam

some banksian pine and spruce with hazel and maple underbrush with scat-

tered groves of white and red pine left undamaged by the fire.

Approaching the Spanish River was a long, sloping and undulating plain of banksian pine for nearly a mile, while the west bank was hilly and mountainous. The largest area of green pine was noticed on the base line between berths "E" and "F" and on the third meridian between berths "E" and "I," being of white and red, about equal in quantity and up to thirty inches in diameter. The Spanish River was crossed first at about nine miles from Craig township, the post being just at the top of the west bank. The river at this point is filled with boulders up to ten feet in diameter and is unnavigable, and also for some distance up stream water being very low at this season. The Sable River where my base line crossed it is shallow and good current with stony bed and very clear cold water and is surrounded by banksian pine plains for some distance on either side.

A branch of the White River (apparently) was crossed at about four and one-half miles west of O. L. S. Salter's fourth meridian and from old cuttings noticed has evidently been used as a canoe route years previously. Towards the end of my base line was a chain of small lakes apparently flowing towards the Mississauga River through a very mountainous and rocky country. Numerous small lakes were crossed and in almost every instance

were the result of beaver work.

Some lakes of large area were crossed on the first meridian south of my base line and on the third meridian north of base line. Pequocut or Russian Lake being a beautiful sheet of water on the canoe route from the Spanish. River to Sable Lake.

The country from beginning to end of base line is rough, rocky and mountainous, with the exception of some areas of banksian pine plains, which were slightly undulating with gravel and boulder formation. Numerous large boulders up to twenty-five or thirty feet in diameter were a continual source of difficulty in producing the line. The Laurentian formation was the principal rock noticed along the line. Considerable outcroppings of red and gray granite were noticed as well as some slate. Some conglomerate was noticed on the first meridian near the south end. No indications of economic minerals were found.

GAME.

Moose, red deer and caribou were frequently seen as well as bear, which were especially numerous in the brule, wolves seemed plentiful and were often heard close to camp at night, beaver were very plentiful, evidences of their work being met with every day, and they were frequently seen at work. Partridge, duck and fish were also plentiful.

Excellent weather was experienced during almost the whole survey with

the exception of some very hot days in July.

The work was completed without hindrance from bush fires, which up to this time had not assumed large proportions. Accompanying this report are general plan, timber plan, field notes and account in triplicate. All of which is respectively submitted.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) J. HENRY BURD,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, TORONTO.

Appendix No. 37.

TOWNSHIP OF EILBER, DISTRICT OF ALGOMA.

GUELPH, ONT., March 7th, 1908.

SIR,-I have the honour to submit the following report of the survey of the township of Eilber, in the District of Algoma made under instructions from your Department dated May 6th, 1907.

This township lies north of the township of Barker.

The Missanabie River enters this township near the southwest corner of lot twenty-eight in the third concession and flows northerly through the western part of the township and crosses the north boundary between lots twenty-six and twenty-seven. The river averages about eight chains in width and in general is not very deep, but flows with a good current.

There are no falls on the river within the township and the only serious obstruction to canoe navigation is a short rapids in lot twenty-five, concession seven, in which there is a descent of five feet, necessitating a short portage over the rocks in ordinary water or on the right bank in high water. This

is known as "Rocky Island Portage."

The township was sub-divided under the new system, a road allowance half a chain wide being left on each side of the outlines, and a road allowance one chain wide between alternate concessions, and a side road allowance between lots six and seven, twelve and thirteen, eighteen and nineteen and

twenty-four and twenty-five.

The survey lines were run in the centres of the road allowances, wooden posts were planted on the concession lines at each lot corner, a post being placed on the centre line and one on the north side and one on the south side of the road allowance, the three posts in each case bing marked with the numbers of the lots on the east and west sides. The centre post was also marked "R" on the north and south sides, the posts on the sides of the road allowance were also marked "R" on the sides next the road and with the number of the concession on the other side.

At a side road a post was planted at the intersection of the lines and marked "R" on each of its four sides. A post was also planted on each of the four lot corners and marked "R" on the two sides next to the roads and with the lot number on the east or west side and the concession number on the north or south side. No posts were planted on the side roads at the blind lines.

There is an iron post one and seven-eighths inches in diameter beside the wooden post at each corner of the township, marked "Eilber" on the sides towards the township. An iron post one and one-quarter inches in diameter was placed beside the wooden post on the south boundary at the line between lots twelve and thirteen, marked "R" on four sides, "Lot XII." on the east side, "Lot XIII." on the west side, "Con. I" on the north A similar iron post was also planted beside the wooden post at each of the following points, viz., on the east boundary at the line between concessions six and seven and marked "R" on four sides, "Lot I." on the west side, "Con. VI." on the south side, "Con. VII." on the north side.

At the intersection of the line between concession six and seven with the side line between lots twelve and thirteen and marked "R" on four sides, "Lot XII." on the east side, "Lot XIII." on the west side, "Con. VI." on the south side, "Con. VII." on the north side.

On the concession line between concessions six and seven on front of lot twenty-eight, one chain east from the shore of the lake and marked "Lot

XXVIII." on the east side, "Con. VI." on the south side, "Con. VII." on

the north side, and "R" on the north, south and west sides.

On the north boundary at the line between lots twelve and thirteen, marked "Lot XII." on the east side, "Lot XIII" on the west side, "Con. XII." on the south side and "R" on four sides.

In the survey I adopted the river as the boundary between the northern part of lot twenty-seven and lot twenty-eight, concession nine and as the boundary between lots twenty-seven and twenty-eight in concessions ten and eleven, and between lots twenty-six and twenty-seven in concession twelve.

The surface of this township is gently undulating and it is well drained

by the Missanabie River and small streams flowing into it.

The township contains a large amount of good dry land and there are no large swamps and very little wet swamp land which cannot be easily drained.

The rock outcrops at a few places along the river and in the interior of the township one or two small exposures were seen.

The soil is clay and in the swamps the clay is overlaid with black muck of various depths which in turn is covered with a thick growth of moss.

The timber is a young growth and consists chiefly of spruce and poplar. The poplar is of good quality and where found is usually thick on the ground. Much of the spruce is small, very few of the trees reach twelve inches in diameter and where trees of that size are found they are often thin on the ground.

The agricultural possibilities of this township are good. The soil is rich, there will be very little waste land and as the Transcontinental Railway will cross the southern part of it, it will be easy of access.

There is very little large game in this township and very few fish were

found in the river.

Accompanying this report are the field notes of the survey, a map of the township and a timber plan, all of which I trust will be found satisfactory.

I have the honour to be,
Sir,
Your obedient servant,

(Signed) James Hutcheon, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, TORONTO.

Appendix No. 38.

BASE AND MERIDIAN LINES, DISTRICTS OF ALGOMA AND THUNDER BAY.

TORONTO, ONT., November 30, 1908.

Sir,—We have the honour to submit the following report on the survey of certain base and meridian lines, forming the outlines of townships nine miles square in the Districts of Algoma and Thunder Bay, made by us during the past summer, under instructions dated 21st May, 1908.

Nine men were taken from Toronto and vicinity and thirteen others were engaged at various points along the line of the Canadian Pacific Railway,

between Missanabi and Heron Bay.

A start was made from Montizambert on 13th June, up the canoe route connecting that point with the Albany River, via the Nagagami River. Ten days were occupied in travelling and transporting about thirty-eight hundred pounds of supplies and equipment to the commencement of the survey, a distance of about one hundred and fifty miles, including twenty-six portages.

The last ten miles of the journey—from Cache 9A of the National Transcontinental Railway, at the crossing of the Nagagami River—being devoid of waterway it was necessary to pack the supplies for the

eastern part of the work the entire distance.

The residue of our previous season's supplies having been stored near Cache 9A, we were able to avoid the necessity of transporting an additional twenty-five hundred pounds from Montizambert for this season's requirements. Heron Bay was made headquarters for supplies for the western part

of the survey.

Work was begun on 25th June at the closing point of our work of 1907, the end of the sixty-third mile on the base line, being the southwest angle of the township of Fintry, the northwest angle of the township of McMillan, or three townships' breadth east of the boundary between the Districts of Algoma and Thunder Bay. The initial point was in latitude forty-nine degrees, fifty-one minutes and six seconds north, and was found to be marked by an iron post one and seven-eighths inches in diameter, alongside a cedar post six inches square marked on the east "63M." This post also marked the southeast angle of the township of Mulloy and the northeast angle of the township of McCoig.

We then continued the base line due west, twenty-seven miles on nine mile chords of the parallel of latitude stated above, being from the sixty-third to the ninetieth mile on the first base line, planting a wooden post at the end of each mile and, in addition, iron posts one and seven-eighths inches in diameter at the ends of the seventy-second, eighty-first and ninetièth miles. The ninetieth mile fell short about one and seven-eighth miles (estimated), of the district boundary, that portion of the base line being not completed. This line forms the south boundaries of the townships of Mulloy, Shuel and part of Boyce, and the north boundaries of McCoig, Kohler and part of Clavet.

Returning to the eighty-first mile post we ran due north, nine miles, to the northwest angle of the township of Shuel, and the northeast angle of the township of Boyce, planting a wooden post at the end of each one and a

half miles and an iron post at the township corner.

This line if continued about one-third of a mile north would cross the

located line of the National Transcontinental Railway.

We next ran due west on the second base line, being a chord of a parallel of latitude, forming the boundary between the townships of Bicknell and Boyce, with wooden posts planted at the end of every mile, for a distance of ten miles and sixty-six chains, at which distance the boundary between the Districts of Algoma and Thunder Bay was intersected at a point five chains and fifty-two links south of the ninety-fourth mile post on that boundary.

At the intersection of the second base line with the district boundary, we planted an iron post one and seven-eighths inches in diameter alongside a spruce post marking each as follows: "XM+66c" on the east side, "Henderson" on the northwest side, "Bicknell" on the northeast side, "Boyce" on the southeast side, and "Bell" on the southwest side, and continued the line

due west, on nine-mile chords of the parallel of latitude, for a distance of eighteen miles, establishing the south boundaries of the townships of Henderson and Selwyn and the north boundaries of the townships of Bell and Low.

Wooden posts were planted at the ends of all miles and, in addition, iron

posts at the ends of the ninth and eighteenth miles.

From the end of the eighteenth mile we ran due north between the townships of Selwyn and Barlow, planting wooden posts every one and a half

miles and an iron post at the end of the ninth mile.

We next ran due west on the third base line, on nine mile chords of a parallell of latitude, for a distance of thirty-six miles, planting a wooden post at the end of each mile, except in the cases of the second, eighteenth, twenty-fifth and twenty-seventh miles, which points occurred in the water, and the posts were planted at the nearest permanent places on the shore, or bank, and on the survey line, the distance from the true corners being marked on the posts. Iron posts, one and seven-eighths inches in diameter were planted beside the wooden posts indicating the ends of the eighteenth, twenty-seventh and thirty-sixth miles. The north boundaries of the townships of Barlow, Goodwin, Chipman and Raynar are formed by the third base line.

The boundary between the townships of Goodwin and Chipman was

also run, due south, and posted in the usual manner.

This base line was then continued west, on a nine mile chord of latitude, for a distance of three miles, sixty-nine chains and twenty-five links, to connect with the southern part of South Twin Lake.

We then returned to the northwest angle of the township of Raynar and ran due north four miles, intersecting the located line of the National Transcontinental Railway, at two chains and twenty-five links south of the

fourth mile post. This meridian was posted in the usual manner.

Returning again to the northwest angle of the township of Raynar, we ran due south along the west boundaries of the townships of Raynar and Bain, eighteen miles, planting wooden posts at the end of each one and a half miles, also an iron post at the end of the eighteenth mile.

From this point we ran due east, on the chord parallel, nine miles, to the southeast angle of the township of Bain, planting a wooden post at the

end of each mile. This completed the lines run during the season.

Nearly all the wooden posts planted were of tamarack or cedar, spruce being used only when neither of the former could be obtained. Iron posts, one and seven-eighths inches in diameter, three feet long, forged at the top, pointed at the bottom and painted red, were planted at all township corners except the following:—The northwest angle of the township of Barlow, the southwest angle of Goodwin and the northwest and southeast angles of Bain. These omissions were due to the failure on the part of the supply men to bring the iron posts in from Heron Bay.

In all cases where wooden and iron posts were planted side by side, the

iron post indicates the intended corner.

All lines were well opened out and properly blazed.

Astronomical observations were taken as frequently as opportunity permitted and the directions of lines are in accordance therewith. specimen observations are given in the field notes returned, but a number are omitted as being unnecessary to the returns.

The dense smoke from the distant fires made it impossible to satisfactorily carry on the traverse survey of Long Lake contemplated by the instructions.

The return journey was made via English River, Long Lake and Pic River to Heron Bay and thence by the Canadian Pacific Railway to Toronto, which was reached on 24th September.

GENERAL FEATURES.

The country involved in this survey lay chiefly in the valleys of the Pegutchewan and English Rivers and in the vicinity of the located line of the National Transcontinental Railway, extending over a total breadth of twenty miles from south to north and a length of eighty-seven miles from east to west, the eastern thirty miles, more or less, being in the District of Algoma and the remainder in Thunder Bay. Access is had from the Canadian Pacific Railway as far as the height of land, by the Nagagami Canoe route to the east from Montizambert and the Pic River route from the west. Beyond the height of land the Nagagami route extends as far as the English River and the Pic River route forks, the east branch waters following the waters of the Pegutchewan and the west branch the English River.

Generally speaking the surface is high lying, gently undulating and well

watered, with good drainage facilities.

The clay belt extends, along the lines surveyed, to about thirty miles west of the district boundary and, from credible information received, we believe it here deflects northward. To the west and south, the country is more rugged and the soil sandy and stony. Numerous lakes, some of considerable extent, are found in the more rugged parts.

Fire has swept over nearly half the country east of the English River, which was crossed by our third base line at about twenty miles west of the district boundary, and in some parts a second burning has removed so much of the dead timber that clearing for agricultural purposes will prove a very

easy matter.

Soil.

Good clay soil, exposed to view in many places by the action of fire, covers about the easterly sixty miles of the work, at least seventy to eighty per cent. being excellent farm land.

To the west of the region above described, sandy soil predominates with an occasional small area of clay and outcroppings of granite rock, only a

comparatively small part being suitable for agriculture.

TIMBER.

The timber, in the part lying east of the English River, which has so far escaped damage by fire, is chiefly spruce, tamarac, poplar, balm of gilead, balsam and white birch of good quality, with occasional scrub cedars. If not destroyed before the completion of the railway, a considerable amount of pulpwood will be furnished by the spruce in this region, in addition to supplying the needs of the settlers. The tamarac, nearly all of which is still free from the ravages of the pest, will form a valuable asset in the way of railway ties.

To the west of the English River the timber has suffered less from fire, and comprises spruce, banksian pine, tamarac, poplar, white birch, balm of gilead and balsam, with a few scattered cedars, more particularly in the river valleys. Considerable areas of banksian pine of good quality, ranging

up to ten to fifteen inches in diameter, were seen, these being chiefly in the western parts of the townships of Raynar and Bain.

WATER.

The whole country is well watered by small streams with fairly good current, indicating excellent drainage facilities. Lakes and swamps are much less numerous in the clay region than in the lighter country to the west.

The main streams crossed by our lines, taken in order from the east are:—

Trout River, a stream one chain in width, three feet in depth and water

clear and good.

Bad River, which has a breadth and depth similar to the Trout, with clay banks thirty feet high, rapid current and stony bottom. Its water is clear and good.

Flint River, a sluggish stream about one chain wide, four to five feet deep, with clay banks two to three feet high. The bottom is clay and the

water is somewhat tinged by clay.

English River, where crossed by the third base line, is four to six chains wide, with a depth of about ten feet and clay banks varying from five to fifteen feet high. Its current at this point is moderate, with rapids both above and below the crossing.

Devil Fish River, about five chains wide and four to six feet deep, has a moderate current where crossed by the west boundary of the township of Bain, but has rapids at various points. Its banks here are two to four feet high.

Little Long Lake River, about three chains in width and four feet in

depth, where crossed by the west boundary of the township of Bain.

Long Lake River, sometimes called English River, crosses the south boundary of the township of Bain at a breadth of about two chains and depth of four to five feet. The clay banks are five feet high and current moderate. This stream, supplemented by Little Long Lake River and Devil Fish River, forms the English River proper.

MINERALS.

The Laurentian formation embraces the whole of the region touched by this survey. Outcroppings of rock in the clay district were rare and of slight extent, except in the beds of streams.

In the western part, granite and gneiss outcroppings were seen at inter-

vals, but no traces of economic minerals were found.

We were, however, informed by Indians belonging to our party that a number of iron claims have been staked about thirty miles west of the township of Bain.

GAME

No large game of any kind was seen. Fur-bearing animals were scarce and even rabbits were rarely seen.

In all the streams, large and small, we found abundance of speckled

trout, during the early part of the season.

The larger lakes contain whitefish, pike and pickerel.

GENERAL REMARKS.

The climate, as observed during the three months was all that could be desired for agricultural pursuits. Only one frost was experienced up to the second week in September, and it was not sufficiently severe to do damage. At the caches the vegetables freely grown included potatoes, cabbages, beets, peas, lettuce, radishes, onions, tomatoes, and in fact nearly all the varieties common to Older Ontario. Between the 20th and 26th July, the thermometer ranged from seventy-five to ninety-three degrees Fahrenheit. The lowest temperature recorded last winter at the English River Cache was thirty-five degrees below zero, and that at Jack Fish twenty-eight degrees. Navigation on South Twin Lake opened this year on 18th May, it having been closed by ice on 15th November, 1907.

The latter part of the summer of 1908, was particularly dry, and as a consequence the starting of forest fires was difficult to avoid, but we are able to record that none were occasioned by any members of our party. This is perhaps due to the fact that usual camp lectures on the dangers from carelessness were further impressed upon the men by the devastations witnessed in the early part of the season. Fire, said to have started at Nagagami Lake, had swept parts of that territory about four or five years previously. Later fires had cleared so much of the burned timber that little is left in some places for the future settler to do in preparing the lands for farming, but he will miss the timber necessary for the ordinary purposes of homesteading. In other places the windfalls resulting from the first fire were almost impenetrable and necessitated the employment of one or more axemen to clear the way for the packmen.

There is already a winter road from Jack Fish Station on the Canadian Pacific Railway to the foot of Long Lake, about eighteen miles, used by the Hudson's Bay Company and Revillion Brothers for freighting supplies for the ensuing summer for use at their respective stores on the northwest and northeast shores of Long Lake, the transport over Long Lake, a distance of about fifty miles, being made by sailing boats in the summer season. It is probable that this stretch of navigation will be served by steamboats during the coming season and the necessary summer roads from Jack Fish to Long Lake, and from the head of Long Lake to the National Transcontinental Railway, the latter a distance of about twenty miles, will be constructed by the railway contractors. This appears to be the only feasible supply route from the Canadian Pacific Railway to the National Transcontinental Railway between Lake Nipigon and the new town of Cochrane, at the present terminus of the Temiskaming and Northern Ontario Railway.

When the agricultural land embraced by our survey of 1908 has been made accessible by the completion of the National Transcontinental Railway, some three years hence, we see no reason why this land should not be as much sought after as that of northern Manitoba and Saskatchewan, the excellence of which has been so well demonstrated.

Accompanying this report are a general plan, field notes and triplicate account.

We have the honour to be, Sir.

Your obedient servants,

(Signed) Speight & Van Nostrand, Ontario Land Surveyors.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 39.

TOWNSHIP LINE, MORLEY AND PATTULLO, DISTRICT OF RAINY RIVER.

FORT FRANCES, ONT., December 23rd, 1907.

Sir,-I commenced work at an original post marking the corner of the township of Morley, Pattullo, Shenstone and Tait, chaining thence west following the old line between the township of Morley and Pattullo. I found, at the distances given in the original field notes, or very nearly so, original bearing trees at one-quarter section thirty-six, one-quarter section thirty-five, northeast section thirty-four, northeast section thirty-three, onequarter section thirty-three, northeast section thirty-two, one-quarter section thirty-two; at one-quarter section thirty-five, and northeast section thirtytwo, also found the original posts, I renewed these old posts and planted new posts at the correct positions for section and one-quarter sections, as far west as one-quarter section thirty-two. I then proceeded to the post planted by me in 1903, between sections thirty and thirty-one, Shenstone, and thence chained west along the north boundaries of sections twenty-five, twenty-six, twenty-seven and twenty-eight. I found original posts between sections twenty-five and twenty-six, twenty-six and twenty-seven, at one-quarter section twenty-seven, and between twenty-seven and twenty-eight. tances given in the field notes I found to be entirely wrong, the errors being as follows, actual chainage being:

Section twenty-five between posts four chains twenty-eight links too long. Section twenty-six between posts one chain four links too short.

Section twenty-seven between posts twenty-seven links too long.

Section twenty-eight from original post to intersection, three chains

seventy-seven links too short.

I next proceeded to re-run the north and south lines, with the following results:—East boundary, section thirty-five, re-ran this line north from original post, found original bearing tree at one-quarter section, line produced could not be followed to township boundary; apparently the line had been produced to within a short distance of the boundary and then stopped. A short line two or three chains long runs south from where the original post was. East boundary section thirty-four along Government Road totownship boundary. The west boundary of road, which apparently followed the old line, strikes four chains two links west from correct position of original post.

Original cutting could be followed along the southerly part of the line, but no blazes could be found, all fair sized trees having been used in road-

making.

East boundary section thirty-three, re-ran north from original post at southeast angle and found original bearing tree at one-quarter section, at

this point the line stops.

The line to one-quarter section is in green timber, which extends to, and past the boundary, and it is evident that no line was originally run through, as had one been run some evidence would still have existed, a very careful search was made, but no evidence of old axe work could be found.

East boundary section thirty-two, re-ran line through from south and found line in correct position running direct to original post, on north bound-

ary, found also original post and bearing tree at one-quarter section.

Having run these lines I next proceeded to re-run the south boundaries of sections twenty-five and twenty-six, chaining west from original post on township boundary, I found as follows:

South boundary section twenty-five now original to intersection, three

chains twenty-three links too long.

South boundary section twenty-six now intersection to original post fifty-five links too short, I followed the original line south along the Government road and found original posts at the southeast corner section twenty-two, and one-quarter section fifteen. These posts are all on line of road running east astronomically of section fifteen, twenty-two, twenty-seven and thirty-four, showing that the original line ran through, although in wrong position.

I next proceeded to join up one-quarter section post on east boundary section thirty-five, planted from original bearing tree to correct position post between sections thirty-five and thirty-six. This line runs for twenty chains across cleared and ploughed land in northwest one-quarter thirty-six.

I then joined up original post at southeast angle section thirty-four to post at northeast angle planted in true position from original bearing tree. This line passes directly through large frame house owned by D. Anderson on the north half of southwest one-quarter section thirty-five, also run across twenty chains of cleared and ploughed land on northwest one-quarter.

I then ran from post planted from original bearing tree at northeast angle section thirty-three to post at correct position from original bearing tree between the northeast and southeast one-quarter sections. On this line I found the chainage to creek to differ approximately five chains from that

given in original notes, another proof that the line was never run.

I then proceeded to one-quarter section post on the north boundary section thirty-two and chained west to the township boundary. I could not find the original post or bearing tree at the corner, the land having been cleared this summer, but I obtained affidavits from two parties stating that its position was at the intersection of original lines, now fenced. This position I can also certify to; as I have personally chained along the Dilke boundary from the post following the old line. I did not place any one-quarter section post or section post on section thirty-one as I am informed that the parties owning these lands can give affidavits shewing that the section post (northeast section thirty-one) was at the intersection of the north and south line which runs direct across from Morley and Patullo and that the one-quarter section post on north boundary thirty-one was distant forty chains from said section post. I however show on plan the distance divided proportionately.

Having completed the work so far in Morley I proceeded to retrace and chain lines in Patullo, I found everything in the township to be correct as

far as I went, agreeing with the original field notes.

The foregoing gives the result of this survey, more work would be necessary to completely straighten the original work but in view of the fact that according to my instructions no extensive re-survey was wanted and also of the fact that the municipality of Chapple is preparing a petition to the Government to have some work done which will enable them to keep roads, etc. in their present position, also to ascertain the correct acreages of the one-quarter sections for assessment purposes, I have not proceeded further than indicated on my plan.

I have the honour to be, Sir,

Your obedient servant,

(Signed) D. J. GILLON,

Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 40.

TOWNSHIP OF TEMPLE, DISTRICT OF RAINY RIVER.

SARNIA, ONT., July 30th, 1908.

Sir,—I beg to forward, together with this report, plans, field notes and timber map of the township of Temple, in the Rainy River District.

A portion of this township was surveyed in 1906, and late in the fall of last year I resumed work by running the various concession lines west to Eagle Lake, and the side lines north and south.

I retraced, blazed and chained the east town line, making the various concessions eighty chains or thereabouts. I also surveyed the south boundary. The traversing was all done on the ice, considerable difficulty being experienced by water.

Iron posts are planted alongside of wooden posts, properly marked with a cold chisel, at the following places, viz.: At the southeast corner of the township. On the line between lots six and seven on the shore of Eagle Lake. At the southwest corner of lot ten, concession one, being the southwest corner of the township. On concession lines three and four on the east town line. At the intersection of concession lines three and four and side line six and seven in a muskeg. On concession line three and four at the distance of six chains twenty links west of the line between lots ten and eleven on the shore of Eagle Lake. At the northeast corner of the township. At the intersection of side line six and seven with the north boundary.

The iron post planted by Mr. Tiernan on lot 10, south boundary of Mutrie, was in addition marked "Temple."

The township throughout is very hilly and broken, consisting of granite ranges with quartz.

TIMBER.

Concession six is principally jackpine and scrub, partially burned.

Concession five is principally mixed timber, birch, balsam, poplar, spruce and tamarac, with small areas of swamp lands containing spruce. and tamarac. All merchantable timber excepting cord wood has been removed throughout the whole township.

Concession four has in addition to mixed timber, some tamarac and spruce swamps, a few scattered white and Norway pine.

Concession three has mixed timber with small areas of tamarac and spruce with few Norway and white pine, and in addition a few small isolated patches of cedar, ranging in size from three to twelve inches.

Concession one and two are practically all mixed timber. No areas of spruce suitable for pulpwood were found.

FARM LANDS.

Good arable land was found in the southern and middle parts of the township, and about forty-five per cent. of the whole area is suitable for agricultural purposes. For a distance of ten to forty chains from the waters of Eagle Lake the ground is very broken and rocky.

MINERALS.

No minerals of any economic value were found, though there were strong magnetic variations noted in several places, and on the west shore of concession six a magnetic iron ore exists, but of very lean grade. This is not in any large quantity but appears in small patches and is not at all likely to lead to a body of ore of any value, and as far as known exists only at this particular point. No specimens were obtained.

There are no water powers and no creeks of any size, excepting on lot four, concessions three and four, which in some places is one chain wide, but the water is pure and sweet throughout the whole township. No alkali.

FISH AND GAME.

Eagle Lake abounds in white fish, trout pickerel, and pike or jackfish, and at least one company is operating quite largely in fishing these waters.

Fur bearing animals include moose, caribou, red deer, wolf, lynx, beaver, mink and muskrat, but feathered game was not at all plentiful.

Soil.

Is light and sandy with clay subsoil, and in the vicinity of low places is of good quality.

ISLANDS.

Boat Island has little or no arable land. Canoe Island has probably about twenty-five per cent. of agricultural land. The smaller islands are suitable only for summer resorts and cottages.

SETTLERS.

Only two settlers were found within the area surveyed, both occupying improvements already made, house and stables. C. Kern on lot one, concession six, north of the Canadian Pacific Railway, about fifteen acres cleared. J. H. Gordon has cut and cleared about fifteen acres on lot one, concession five and six, but has no buildings. Charles Leitchford on lot two, concession six, about one and one half acres cleared.

Shacks have also been erected by the following parties: C. Coppock on southeast quarter of lot one, concession five, by J. Freak on northeast quarter of lot one, concession four, all of Eagle River Post Office.

I have the honour to be, Sir, Your obedient servant,

> (Signed) John J. Francis, Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 41.

BLOCKS V. AND VI. OF THE GRAND TRUNK PACIFIC RAILWAY GRANT, DISTRICT OF THUNDER BAY.

WESTON, ONT., February 13th, 1908.

SIR,—I have the honour to submit my report of the survey of Blocks V. and VI. of the Grand Trunk Pacific Railway Company's Land Grant (Chap. 18, 4 Edw. VII.) performed under your instructions of the 30th May,

1907, namely):

Proceeding to Port Arthur, where I completed all my arrangements for the prosecution of the work, I then moved to Niblock and commenced the work by opening and running the boundary line between townships thirteen and fourteen from the Canadian Pacific Railway to the northwest corner of township twelve. I renewed the wooden stake at said corner and ran the east boundary of said township fourteen, north astronomically six miles. Then I ran east astronomically twenty-one miles to the southeast corner of Block V., thence north astronomically six miles to the northeast corner of the said Block V., thence west astronomically eighteen miles to the northwesterly angle of the said Block V., thence south astronomically five miles and seventy-nine chains and seventy links to the southwest angle of the said Block V., completing the survey on the 31st August.

I then commenced the survey of said Block VI. from the mile post marked LXXVIII M on the boundary line between Thunder Bay and Rainy River Districts, running eighteen miles astronomically east to the southeast angle of the said Block VI., thence north astronomically six miles to the northeast angle of this said Block VI., thence west astronomically eighteen miles and sixty-one and one half links to its intersection with the said boundary line between the Thunder Bay and Rainy River Districts, completing the

survey on the 8th day of November.

At every corner of each block I planted iron posts marked "G. T. R." and the number of the block, namely, Block V. or Block VI., as the case might be; the iron posts were all one and seven-eighths inches, excepting on the easterly corners of Block V., which are one inch square.

I placed wooden posts at each mile along the lines marked on the east side of the east and west lines and on the south side of the north and south lines. At the northeast corner of township fourteen I also planted a one

and seven-eighths inch iron post.

The soil throughout Block V. is generally light sand but varying from light dust to very coarse sand and gravel with stones. I have seen only one place where I think it possible to pursue agriculture with a liklihood of success, namely, on the south boundary immediately east of the railway location, where there are about two square miles of light sandy loam and almost clear of timber. The rest of the Block is composed of low cold bottom land with sandy ridges from some of which granite rock protrudes. Hills and depressions are seldom over twenty or thirty feet.

There is a block of timber in the southwest corner of this Block which may be considered as suitable for tie timber; but beyond this there are only a few scattered trees here and there, that would be large enough for railway ties. This whole country was burnt over about twenty-five or thirty years ago, and a great part of it burnt again in June, 1907, and much timber was

destroyed.

The rocks seem to be all of granite formation and I saw no mineral of any kind.

There are no mill sites nor large streams but lakes are very numerous,

probably one hundred in the block abounding in pike and pickerel.

Block VI. has but little agricultural land and generally is very similar to Block V. though the hills are generally much higher than in Block V., being as much as eighty or one hundred feet in some places. This block has also been burnt over about twenty-five or thirty years ago, though timber is very much more abundant here than in Block V. There are a few trees of white pine eleven miles east of the District boundary line, of about thirty inches diameter, being the only white pine seen in either block. But in Block VI. there is a good deal of jackpine and spruce, fourteen inches in diameter scattered through the block; but no large solid masses and is chiefly found along the south boundary of the block and east of Selwyn Lake. There is also about a square mile of jackpine on the east side of Narrow Lake, and north of the Wonwong River; windfall is very general. This block is also full of lakes.

There are no water falls except at the outlet of Rock Lake at the east end of Selwyn Lake, and there there might be found a good mill site, judging from the great amount of water flowing into the lakes above it (though I have had no opportunity of seeing it).

The English River passing through this block, is more like an extension of Selwyn Lake than a river, and is navigable for steam tugs for about

twelve miles to the north.

The Wonwong River is navigable for canoes up to its intersection with the south boundary line of this block, and there are several good canoe routes to the north boundary of Block VI.

> I have the honour to be, Sir, Your obedient servant,

> > (Signed) John J. Dalton, Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 42.

BLOCK VII. OF THE GRAND TRUNK PACIFIC RAILWAY GRANT, DISTRICTS OF THUNDER BAY AND RAINY RIVER.

WESTON, ONT., August 19th, 1908.

SIR,—I have the honour to submit my report of the survey of Block VII. of the Grand Trunk Pacific Railway Company's Land Grant (Chap. 18, 4 Edw. VII.) made under your instructions of the 30th day of May, 1907, which I commenced on the 28th day of May of this year by the south boundary, east three miles and west three miles from the post marked XCx, on the boundary line between Thunder Bay and Rainy River Districts.

I then ran the western boundary of the Block due north 18 miles, then the northern boundary east six miles, then south eighteen miles to the south-

9 L.M.

easterly angle of the Block, placing the posts at the intersection of the two boundaries. The north boundary intersecting the District boundary line, 5.90 chains south of the post marked "CVIII." though the last mile on the east boundary was 79.40 chains.

The posts on the meridian lines are marked on the south side, and those

on the chords are marked on the east side.

The soil wherever found is generally of a very light sandy clay, loose and friable, the colour resembling raw sepia. In places underlying this is coarse sand or sand and gravel bed but in many places rock intervenes,

especially around the large lakes and the high ground above them.

Good timber is abundant only between Sturgeon Lake and Bell's Lake, where I found excellent cedar, spruce, jackpine and tamarack, which would answer the purpose of telegraph poles, railway ties, and much good lumber. The cedar swamps are the best that I have seen in these districts. There is some good birch and pine just east of the English River on the south boundary of the Block and extending northward.

Then the muskegs all contain more or less spruce, though I notice that

it is very seldom that large spruce grows in muskegs.

I saw only one waterfall in the Block being about four or five feet which is at the outlet of Palette Lake on a stream about equal to the Humber River at Toronto.

The rock is all of the Laurentian formation and I saw no economic minerals.

The Block is very much cut up with lakes of which Bell's Lake and Mattawan Lake cross the entire Block, and all the lakes are remarkably full of small rocky islands giving a very picturesque effect.

of small rocky islands giving a very picturesque effect.

Bell's Lake and Sturgeon Lake contain an abundance of excellent trout,

white fish and other varieties of fish.

The survey was completed on the 30th day of June, 1908, and the whole was done in a thorough workman-like manner.

I have the honour to be,

Sir,

Your obedient servant,

(Sgd.) John J. Dalton, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 43.

RONDEAU PROVINCIAL PARK.

MORPETH P.O., January 9th, 1909.

To the Honourable, the Minister of Lands, Forests and Mines.

STR,—I have the honour to submit this my report as caretaker and ranger of the Rondeau Provincial Park, for the year 1908.

Since my last report was sent in, there has been considerable work Some work that was begun last year was completed this season, namely, the building of the new stone-crib dock and the baseball diamond, both of which have been of great service and are appreciated by the public who visit the park. When I urged in the last report that the Government should do some extra dredging in front of the cottages, I had little thought that they would carry out so fully those suggestions. At an extra cost they had the contractors for the dock excavate six additional lagoons extending from the shore line south of the dock out into the Bay to water, two to four feet deep, using the excavated sand and mud to cover the unsightly rushes and water willows between the lagoons along the shore. They also had two similar lagoons excavated on the north side of the dock, for the The lagoon or cut immediately on the north side should have been continued out to the deep water, the same as the one immediately on the south side, so that small crafts could use it as a harbor for protection from storms. This extra dredging has greatly improved the appearance of the waterfront, and also improved the sanitary condition by covering up unhealthy debris along the shore.

A demonstration plot of about four acres of ground has been fenced on the Park, and about 7,000 nursery trees, five varieties of pine and some black locust, planted therein. This work was done by and for the experience of the students from the Forestry Department of the University of Toronto, of which Dr. Fernow, Professor of Forestry, is Dean, and who was present giving theoretical instruction to the students. The work was carried out under the direction of Mr. E. J. Zavitz, Superintendent Forestry branch, Ontario Agricultural College, Guelph, who is also connected with the University of Toronto. Although the season has been very dry a large percentage of the trees planted are living. This work is to demonstrate to the farmers, and others who may be interested, that reforestation can be carried on by them profitably, and that it has already become a necessity

if they wish to keep up the supply of timber.

We are glad to say that we have not found it necessary this season to make use of the two fine life-preservers, hooks, etc., which the Government had placed on the Park dock and water front for the use of the public in case of accidents. The public greatly appreciate the provision made

for the saving of life.

The boat service at the Park this season has been very satisfactory. It was furnished by Mr. Fred Weir, practical boat-builder and caterer, who has leased this privilege from the Department. He keeps a supply of first class row boats of various sizes, and sail-boats built with a view to safety, also a very fine gasoline launch, all available for public service.

To prevent the continuation of high water and floods on portions of the Park in the spring of the year, an open ditch was dug a distance of about 80 rods (about on a level with the water in the bay,) which will give a free outlet into the bay to the water that accumulates nearly every spring, in the slough running through the picnic ground. In former years this water has been a breeding ground for mosquitoes. It is widely known that the mosquito nuisance has been one of the great drawbacks to this Park. A six-inch tile had been laid through this low slough a number of years ago, and had become clogged, and at any rate was not large enough to carry off the heavy flow of water, hence the necessity for opening out a large ditch.

With the number of people visiting the park and also the number of cottages for summer residents, increasing each year, it is necessary that a thorough change in the sanitary system should take place. At present each

lot holder builds his own cottage, barn or stable, and dry closet, also sinks his own well (usually a drive well 10 to 14 feet deep), and there are about 30 cottages and over 20 small private stables, besides the stables for the public and the Ranger's use. These shallow surface wells are becoming contaminated. Some of them are not just fit for use now. Good rock water can be secured sufficient for all park purposes at a depth of about 130 feet. There should be something done, in the way of changing the location of all of those small stables, or building a large one, in a more suitable place on the Park. I would suggest that the Government send an engineer who is capable of arranging all of these sanitary matters, and also to lay out a site for a public house, and that they arrange if possible for the building of such a house this season. The Hon. Mr. Cochrane, Minister of Lands, Forests and Mines, was at the Park on the Councillors' picnic day, August 12th, 1908, when a very large crowd of people was present, and a severe storm came on, which wet hundreds of people, who could not find shelter, to the skin. The refectory, the pavilion, and the cottages and other buildings were filled to their capacity, and yet hundreds had to put up with the It should not be necessary for picnickers to have to run into the private cottages for shelter from storms on this park.

I have the honour to be,

Sir,

Your obedient servant,

ISAAC GARDINER.

Appendix No. 44.

ALGONQUIN PARK P.O., January 22nd, 1909.

The Honourable the Minister of Lands, Forests and Mines.

Honourable Sir,-I beg to hand you my annual report upon the

Algonquin National Park for 1908.

During the past year our staff has been composed of thirteen rangers and the Superintendent, whose duty it has been to patrol our great National Park for the protection of the game and fur-bearing animals, the prevention of forest fires, and the maintaining of law and order generally. A good season's work has been done along these lines. My men have travelled in pairs, each two rangers having a certain section under their care. In addition to patrolling these sections the rangers cut out portages, improve streams, erect and repair shelter houses and make bark canoes, snowshoes, sleighs, etc. They also cut the supply of wood for headquarters, put in ice for the summer months, and do other work for the improvement of headquarters and the park generally. I am glad to report a marked change and improvement in the amount of interest taken in the work by the rangers. It is one of the most important requisitions in a ranger—a real live interest in the work. A man who can see a beauty in everything around him will for the very love of it become an efficient guardian.

I am glad to report a very decided increase in game and fur-bearing animals of all kinds. The beaver have so increased that I am confident

should you so desire a large and lasting revenue could be obtained from them. They are to be found in numbers upon every lake, river, pond and creek, in fact so numerous and tame have they become that Mr. Robert Graham, road master of the division of the Grand Trunk running through the Park, informed me last fall that he had instructed his men to hang lanterns at night at the various culverts along the line to prevent the beaver from building dams in them.

Otter, martin, mink and fisher are also numerous and on the increase, while deer are to be found in abundance everywhere. Mr. Brown, conductor on the G.T.R., assured me he counted last summer in a run of eight miles, twenty-six deer feeding along the railway and not at all afraid of the

train.

Moose are also more numerous than in past years, while partridge and

ducks were very much more abundant than I have ever seen them.

Of course all these overflow into the surrounding country, and I have it both from personal knowledge and the testimony of many reliable persons that beaver are fast filling up townships adjoining the Park, where they have been unknown for many years. The deer also keep the surrounding country well stocked, and splendid hunting in the season can now be

had on all sides of the park.

During the month of March, I made a snowshoe trip of over two hundred miles through the centre of the Park, going in from South River on the North Bay branch of the Grand Trunk and coming out at headquarters. I visited the various rangers and went over their sections with them, and was certainly very much pleased with the work they were doing. I crossed several townships on this trip and found game of all kinds most abundant, especially beaver, otter and martin. In the section between the Amable du Fond river and the Nipissing river I found moose in great numbers. I also visited the other rangers and found most gratifying results everywhere.

There is undoubtedly some poaching, but when you consider the vast area and the number of means of entrance into the Park the amount of poaching is very small and infinitely less than reports would lead one to suppose. I might say regarding the reports one so often hears of large quantities of fur being taken out of the Park, I have carefully followed many of them up, in some cases travelling hundreds of miles to do so, and generally find they originate with some person who has been discharged by some of the firms operating in the Park.

I am pleased to report increased co-operation on the part of the limitholders, and I feel that they have very materially helped our men by insisting that their foreman should at once discharge any man known to violate the law. We have built several new substantial shelter houses and cut out several new routes, the principal being a short route connecting the north-

west corner with Burnt Lake via the Nipissing river.

Fishing in the Park has been exceedingly good during the past year, and visitors, of whom there were many hundreds, were delighted, but their greatest delight was in being able to see so much wild life.

I consider one of the most gratifying results of the past year has been that notwithstanding the fact that much damage was done by fire to the north of us, we have scarcely suffered at all. True, we had many fires started, but by prompt action were enabled to control them. I should especially like to mention in this report that upon one occasion where there seemed to be great danger should a wind spring up, I wired Mr. Donald-

son, General Superintendent of this division of the G.T.R., and he at once sent up a special train with a large number of men to assist if necessary.

The black bass introduced some years ago have stocked the waters to the east of the Park for fifty miles, and grand black bass fishing is now had in sections where this the gamest of all fish was formerly unknown. I should like very much to see the rainbow trout introduced here.

The capercailzie introduced from Norway are, I believe, going to succeed. A number of young birds were seen last year. This bird, although large, is a very retiring shy bird, and therefore not often seen, but I trust in a few years they will become abundant in our woods.

I am Sir,

Your obedient servant,

GEORGE W. BARTLETT, Superintendent.

Appendix No. 45.

List of persons holding Cullers' Licenses, issued under the Ontario Cullers' Act, up to 31s December, 1908.

	1	1	
Name.	P. O. Address.	Name.	P. O. Address.
Anderson, M. M	Almonte.	Bartlett, George W	Warren
Allan, James D		Brown, Silas	Klock's Mills
Appleton, Erwin B	Bracebridge.	Boland, W. G	Eganville
	Ottawa.	Baulke, George R	Aylmer, Que.
Adams, J. Q		Bouchey, Arthur	Massev.
Anderson, Patrick J	Campbellford.	Buchanan, Mark	Trout Mills.
Anderson, J. C	Gravenhurst.	Barrett, W. J	Thessalon.
Allan, Alfred	Ottawa.	Bromley, Thomas	Pembroke.
Allen, R. A	Bannockburn.	Bremner, John L	Admaston.
Aikens, Geo. M		Breen, Bernard	Garden River.
Appleby, Ridley	Katrine.	Buie, Dougal	Providence Bay.
Adams, James M	Sault Ste. Marie.	Baker, Thomas	Blind River.
Aylward, James	Peterborough.	Blais, Felix	Hull, Que.
Archibald, John L		Balsdon, George	
Austin, Wm. G	Kentrew.	Bromley, W. H	
Anderson, Charles	Little Current.	Bowers, Isaac	Little Current.
Anderson, John		Brown, Thomas	Barrie
Adair, Thomas Albert	Almanoque.	Bass, Walter R	W. Huntingdon.
Anderson, J. G	Ardena, Mich.	Bates, Robert	Kenora.
Alexander, Samuel	Wostmonth	Binnie, ThomasBlair, William	Vocantin
Arkle, George	Konora	Bick, Thomas	Rebesses
Armstrong, Jas. Theodore		Burke, John Thomas	Midland
Armstrong, Thomas J		Buchan, Sterling	L'Original
Acheson, Ira M	Westmeath.	Brown, Joseph A	
Albert, Alfred E	Ottawa.	Baird, P. C.	
Alma, John E		Brill, J. W	
Adams, George A	Longford.	Beattie, Arthur W	
Ansley, John Albert	Thessalon.	Brock, H. S.	Ottawa.
Ansley, John Jenkins	Thessalon.	Benson, John Bird	Midland.
Ainsley, Alexander	Spanish.	Brennan, Richard Lawrence.	Peterborough.
Apleton, E. A	Kenora.	Brown, Hugh Risside	Huntsville.
Arnill, William	Iron Bridge.	Bryan, Frank	Keewatin.
Adams, Fred	L'Original.	Bennett, Edward Clinton	Ahmic Harbor.
Alexander, R. Harvey	Spragge.	Blaine, Harvie Thomas	Orillia.
Alexander, J. Albert	Spragge.	Borrett, Thomas	Barrie.
Decker Michael Detrick	35	Bickell, James Manuel	Sault Ste. Marie.
Brophy, Michael Patrick	Massey Station.	Buisson, William	Sudbury.
Boland, Abraham Brown, Singleton	Procebridge	Borrett, James A	Sault Ste. Marie.
Barry, Thomas James	Hostings.	Bray, James	
Blanchet, Paul Frederick	Ottowa	Bremner, Geo	
Bird, W. S	Parry Sound	Bromley, Samuel	Pombroko
Bayley, James T	Gravenburst.	Brown, A. C.	Fitzrov Harbor
Bell, Henry	Ottawa.	Berlinquet, Julius	Onimicon Que
Beach, Herbert Mahlom	Ottawa.	Blastora, Fred. L	Harwood.
Barry, Thomas	Millbridge.	Burns, Clifton H	
Beatty, W. R	Parry Sound.	Beaumont, Ernest	Parry Sound.
Brooks, Frederick William	Mackay's Station	Beattie, Alex	Whitney.
Brown, Robert D	Port Sidney.	Brennan, Reginald	Gravenhurst.
Breed, Arthur G	Penetanguishene	Boyd, Geo	Gravenhurst.
Barnes, Thomas George Lee.	Muskoka Mills.	Bissell, Geo. Thomas	Trenton.
Buchanan, Robert	Coldwater.	Baxter, Richard	Deseronto,
Beck, Jacob Frederick	Penetanguishene	Breeaugh, Edward	Deseronto.
Bird, Joseph Manly	Muskoka Mills.	Boyd, Geo. A	
Boyd, John F	Deterbarant	Buchan, Frederick	Arnprior.
Brandin, Martin W	Peterborough.	Barrett, Patrick	Arnprior.
Den, Juni C	r eternorough.	Brundage, Alfred W	гешргоке.

List of Persons holding Cullers' Licenses .- Continued.

Name.	P. O. Address.	Name.	P. O. Address.
Brougham, Thomas	Eganville	Callaghan, Thos., Jr	Comphellford
Blair, Robert I		Carson, Hugh	Vanpoemoru.
Benson, John W	Sturgeon Boy	Calder, George	Woodwillo
Beck, Chas. M., Jr	Ponotanquishono	Callaghan, Dennis	Comphellford
Beatty, W. J	Coldwater	Corigan, Robt. T	Emo
Burns, C. W., Jr	South River	Cameron, John H	Konore
Bell, John Henry	Burk's Folls	Carson, Melvin	Little Current
Berry, Harold.	labelle O	Cameron, John K	Spanish Divor
Black, George	Rarwick	Cassidy, William	Tittle Current
Bettes, John Hiram	Muskoka Milla	Coons, Geo. Washington	Potorboro
Brady, John	Renfrew	Chisholm, Geo. Leopold	Soult Sto Maria
Brown, James	Buckingham O	Clark, Wm. J	Right ondolo
Brooks, W. J	Blind River	Carr, Herbert E	North Ray
Bertrand, Allan	Nairn Centre	Cochrane, Alfred L	Muldoon Oue
Brinkman, Alex. B	Sault Ste Marie	Campbell, George	Fort Frances
Black, Jacob	Barwick	Chalmers, George James	
Beattie, W. J	Arpprior	Caverly, David Charles	Parry Sound
Bromley, William	Westmeath.	Campbell, Archibald J	
Bissell, Harlie	Trenton.	Close, John L	Arnprior.
Brown, Robert		Carmichael, Donald	Arnprior.
Beaton, Hugh		Carty, John	Arnprior.
Bailey, Arthur	Parry Sound.	Cleary, Patrick M	Amprior.
Burd, James Henry	Parry Sound.	Caldwell, Jas. M	Callander.
Bailey, Samuel James	Orillia.	Cushing, John J	Davidson, Que.
Burton, Tinswood	Renfrew.	Crebo, William	Thessalon.
Boyes, James	Huntsville.	Cullen, Michael J	Massey Station.
Brown, John	Rockdale.	Cuthbertson, William	Arnprior.
Brennan, Edward Scott	Sundridge.	Carss, Percy	Thessalon.
Bell, John Arguey	Klock's Mills.	Coghlan, Michael	Chapeau, Que.
Bromley, Edw. H		Cameron, Alexander Gordon	Beauchene, Que.
Bliss, Lawrence E	Byng Inlet.	Cassaday, W. W	Emo.
Buee, Neil	Spanish Station.	Carter, Robert E	
Bowie, James	Brygon Oue	Coleman, Jos	
Barrie, Nicholas J		Cameron, W. D	
Burke, J. D		Crandall, F	
Bowen, Thomas	Deseronto.	Campbell, James R	
Brown, James F	Baysville.	Campbell, John A	
Blastorah, Bernard	Harwood.	Caillier, Hyacinth	
Brannan, William H	Pembroke.	Chamberlain, Thomas	Bobcavgeon.
,		Cooper, David Allan	Millbrook.
Campbell, Robert John	Flinton.	Cox, Henry	Ballerica, Que.
Carpenter, John A	Arnprior.	Currie, James	Ottawa.
Campbell, Alex. J	Trenton.	Clarkson, A. E	
Carson, James	Bracebridge.	Clairmont, E	Gravenhurst
Campbell, J. M	Bracebridge.	Cameron, W. F	Sturgeon Bay.
Campbell, Robert	Bracebridge.	Connolly, David	Gravennurst.
Clairmont, Joseph	Dampbelliord.	Campbell, P. C	
Clarkson, Robert J	Hintonburg	Cadenhead, Alexander Carpenter, R. J	Arpprior
Carruthers, Aaron		Christie, William Pringle	Severn Bridge
Chew, Joseph	Gravenhurst	Campbell, C. V	Sault Ste Marie
Cole, James Colin	Ottawa.	Clegg, Samuel	Peterboro.
Cameron, Wm	Collin's Inlet.	Clairmont, William L	Gravenhurst.
Cain. Robert:	Midland.	Cook, Sydney P. W	Spanish Station.
Crawford, Stephen W	Thessalon.	Corrigan, John	Baysville.
Cochrane, George	Peterboro.	Chalmers, Alexander M	Peterboro.
Coburn, John	Lindsay.	Charlton, George A	Collingwood.
Cobuin, commence	TD 1	Cahill, Thomas	Vogbonging
Crowe, Nathaniel	Bobcaygeon.		
Crowe, Nathaniel	Norman.	Chew, Manley	Midland.

List of Persons holding Cullers' Licenses .- Continued.

Name	P. O. Address	Name	P. O. Address
Cook, Reinhardt	South River.	Davis, William Albert	Bobcaygeon
	Bobcaygeon.	Dickson, Robert Alexander	Keene
Callaghan, Dennis	Trenton.	Dawkins, John	Gravenhurst
Collins, James	Barryville.	Doxsee, James E	
Claffey, Edward D	Fort William.	Didier, L. P	Aylmer, Que.
Covne, Phin	Chelmsford.	Deviné, Patrick J	Sheenboro, Que
Constantine, Eudore	Blind River.	Dinsmore, Richard	
Cameron, Ewan	Gordon Lake.	Dunn, Percy E	
	Buckingh'm, Que	Duval, Chas	Halfway
Canniff, R. W	Kenora	Donlevy, James	Calabogie
Cassidy, S. C	Dunchurch	Doris, Patrick	
Charleson, John Baptiste	Ottawa	Doris, John	
Comer, Billa F	Tweed	Donahoe, Michael	Erinsville.
Carter, George	Sundridge	Doran, W	Belleville.
Corrigan, Robt. T	Emo	Dickson, Robert R	
Caswell, Grant		Donlevy, Wm. C	Kockcliffe.
Caswell, Geo	Coldwater	Duff, Chas. A	Stewartville.
Chemir, David A	Pembroke	Dean, James C	
Clairmont, Philadelp L	Gravenhurst	Duff, Peter A	
Crowe, Edgerton	Bobcaygeon	Duncan, Downey	Kainy Kiver.
Castonquay, A. C	Chelmstord	Dougherty, J. M	Fort Frances.
Clark, Donald Allan	Port Artnur	Dunn, John F	Spanish Mins.
Charette, Herbert	Devlin	Dyke, Morris F	Blind River.
Christie, Uriah W	Fort Frances	Devitt, Frank	Dinorwic.
Clark, Joseph C	Port Frances	Dickie, David	L'ocwatin
Crowe, Leslie	Stornartville	Dupuis, Alfred	Keewann.
Campbell, Duncan W	Ammin	Enlaw Oliver	Comphallford
Callahan, Thomas N	Pont Divon	Enlaw, Oliver Ebert, Andrew P	Pombroka
Clements, Albert James	Soult Sto Morio	Eslis, Alexander	Arnnrior
Carney, Albert	Massay Station	Ellis, John	Westmeath
Collins, Arthur	Lavallee One	Errington, Joseph	
Chitty, Alfred E	Kanora	Eddington, Henry John	
Cardiff, Richard J		Enright, Daniel	Port Arthur.
Conway, Thomas		Eager, James	Parry Sound.
Costello, Thomas M		Elliott, Porter P	Mine Centre.
Josephono, Thomas na		Elliott, William	Cache Bay.
Didier, Hector	Mattawa	Edgar, J. E	Rat Portage.
Doran, Frank	Barryvale	Elliott, George E	Peterborough.
Dunning, E. Percival Duff, R. J	Parry Sound	Edwards, Joseph K:	Gillies' Depot.
Durrill, John W	Ottawa	Fraser, John A	Kenora.
Dickson, John	Sundridge	Ferguson, Wm. H	Red Bay.
Dickson, Jas. L	Michipic'ten H'r	Forbes, Christopher McKay.	McLean's Depo
Dobie, Harry	Sault Ste. Marie	Fitzgerald, E. Clair	Parry Sound.
Deacon, Charles	Sault Ste. Marie	Farrell, W. H	Ironside, Que.
Danter, R. W	Parry Sound	French, Lewis William	Byng Inlet.
Doyle, T. J		Fraser, William A	Mattawa.
Dobie, Alexander R	Blind River	Finnerty, Patrick	
Darling, J. M Dillon, John	Wisawasa	Farnand, Frank	Diamond.
Dillon, John	Calabogie	Fulton, Philip S	Spanish Statio
Durrell, Jos Nelson	P'rt'ge du F'rt, Q	Fitzgerald, Ullyot C	Parry Sound.
Durrell, John		Fenn, George	Bracebridge.
Donally, Richard S	Sunbury	Fortune, Owen	Trenton.
Devine, William Durrill, William	Cook's Mills	Fraser, David	Norman.
Durrill, William	Nosbonsing	France, John	Collin's Inlet.
Draper, Patrick	Quyon, Que.	Ferguson, Ernest A	Baysville.
Davis, J. P.	Bobcaygeon	Ferguson, Alpheu	Mattawa.
Dale, John Alexander	Birkendale	Ford, John William B	P'r'tge du F'rt,
Dinsmore, Chas. L	Huntsville	Ford, Charles	Wahnapitae.
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Drum, Patrick Durham, Edgar S	Belleville	Findlay, J. HFraser, James	Braeside.

List of Persons holding Cullers' Licenses .- Continued.

Name	P. O. Address	Name	P. O. Address
Faulkner, Jos	Fesserton.	Griffin, James	Spanish River
Fraser, Alexander Jr		Gordon, Alexander B	Pembroke
Fairbairn, William	Calabogie.	Gareau, Noah J	
Fraser, Wm. A		Gillies, D. A	
Fraser, Foster	Pembroke.	Gilligan, Edward	
Fraser, Wm		Gladman, Charles	
Fraser, Hugh Alexander	Pembroke.	Garrow, John D	
Flaherty, John		German, William Burton	
Fisher, Wm		Gordon, Robert W	
Fox, Thomas		Guertin, Nelson	
Fallis, James W	Sturgeon Bay.	Gardener, John	
Fairbairn, N. H	Webbwood.	Gunter, Peter M	Gilmour.
Fairbairn, N. H Friel, John	Trenton.	Glennie, William	Millbridge.
Fox. Charles	Trenton.	German, Maurice J	Fenelon Falls.
Featherstonhaugh, Wm. H'y.	Penetanguishene	Gillies, John A	Braeside.
Friar, Schuyler	Westmeath.	Goddin, Edward	Griffith.
Farren, Joel	Savanne.	Grant, Joseph	Eganville.
Fraser, Duncan	Big Forks.	Gilmour, James B	Braeside.
Freestone, Walter	Burk's Falls.	Gorman, Joseph P	Sault Ste. Marie
Fraser, John	Bancroft.	Gordon, Thomas A	Hall's Bridge.
Fitzgerald, D. C	Spanish Station.	Gray, Albert H	Biscotasing.
Foster, Wm. C	Searchmont.	Gadway, John	Parry Sound.
Frazer, Jas. C	Spanish Mills.	Garrow, Edward	Webbwood.
Fremlín, H. P	Richards' Land'g	Golding, William	Dorset.
Foster, Ed . G	Sault Ste. Marie.	Gillies, Harry	White Lake.
Farrel, Peter M	Whitefish.	Gordon, Herbert C	Nelson.
Fairhall, Edward	Whiteside.	Gillespie, M. H	Cook's Mills.
Fraser, Levi		Griffin, William	Huntsville.
${f Fiddes}$, ${f James}$		Ganton, David	
Frawley, Frank	Orillia.	Graham, George L	
Fisher, George	Sault Ste. Marie.	Graham, Frederick S	
Filiatrault, J. A	Blind River.	Gill, Cuthbert	
Farrier, John William	Chapleau.	Graham, James Robert	
Finney, Benjamin B	Fort Frances.	Graham, Thomas Jordon	
Follis, Frank C		Gaudaur, Antoine Daniel	
Fortune, Percy H	Blind River.	Gorman, Patrick	Eganville.
Fraser, Wm. Foster	Sault Ste. Marie.	Guy, Charles	Fort Frances.
C.: MAIL C TO	D b b	Graham, George H	Gilles Depot.
Griffith, Geo. F	Pembroke.	Greer, George P	
Graham, John		Gill, Charles	
Golden, Jno	Trantan	Gamey, William H	
Gunter, Henry M	Pardovilla	Gorman, Michael J	Diver.
Goltz, Ernest	Gilmonn	Hurd, Cyrus	Parry Sound
Green, Forman A	Porry Sound	Henderson, Albert E	Rurford
Green, Samuel E Grant, John	Flinton	Hale, John B	
Green, Arthur		Hickerson, Melvin T	Fort Frances
Green, Norman McL		Howey, George H	Fort Frances
Gillis, John J	Whitefigh	Hartt, James	Gilmour
George, R		Hayes, James	Enternrise
Gardiner, John	Parry Sound	Humphrey, T. W	Gravenhurst
Golden, Frank J	Trenton	Huckson, A. H.	
Garson, Robert	Thessalon	Handley, Robert	Douglas.
Gropp, August	Penetanguishene	Howe, Alexander	Queensborough
Grozelle, Antoine D	Muskoka Milla	Hurd, Edwin	Hurdville.
Goulais, James	Peterborough	Huff, J. S. Morris	Arpprior.
Grayson, Charles	Keewatin	Halliday, Robert J	
Gladstone, Harry E	Cook's Mills	Button, John	Hutton House
Guertin, Oliver		Hutchinson, Wm. E	Huntsville.
Gelinas, Frank		Hogarth, Joseph Rowan	Pembroke.
Gwynne, John		Humphrey, John	Gravenhurst.
Gray, Frederick M		Humphrey, John	Midland.
Graham, Edward G		Hall, David	-

List of Persons holding Cullers' Licenses.—Continued.

Hines, Philip Wallace. Hudson, John Lewis. Combermere. Hudman, William H. Ottawa. Hughes, John Lewis. Combermere. Hurdman, William H. Ottawa. Johnson, Frank N. Ottawa. Hughes, John. North Bay. Howie, R. G. New Liskeard. Helferty, Dennis. Eganville. Hamilton, Robert. Kenora. Hoppins, Abiram Kingston. Hoppins, Densmore. Kingston. Hoppins, Densmore. Kingston. Harystead, John Parry Sound. Henderson, John Irwin. Bobcaygeon. Hartley, William. Millbridge. Higgins, John C. Peterborough. Pembroke. Hardwkins, E. Le Breton Flats. Henderson, Charles. Bracebridge. Halliday, Frank. Parry Sound. Hammond, W. Orillia. Menderson, Charles. Bracebridge. Halliday, Frank. Parry Sound. Hammond, W. Orillia. Menderson, Arthur. Baysville. Hunden, J. A. Ottawa. Halliday, James. Springtown. Hundman, J. A. Ottawa. Hurdman, W. R. Bilind River. Hurdman, Jul	Name.	P.O. Address.	Name.	P. O. Address.
Hawkins, Henry Charles Blind River Hudson, John Lewis Combermere Hurdman, William Ottawa Johnson, John Peninsular La Johnson, S. M. Arnprior Howie, R. G. New Liskeard. Helferty, Dennis Eganville Hamilton, Robert Kenora Hoppins, Abiram Kingston Hoppins, Densmore Kingston Johnston, John Wilsawasa Hoppins, Abiram Kingston Hamilton, John Jrn Penry Sound Hoppins, Densmore Kingston Johns Kingston Johns Maystead John Parry Sound Henderson, John Jrn Penbroke Hawkins, E Le Breton Flats Henderson, John Jrn Penbroke Hawkins, E Le Breton Flats Henderson, John Jrn Penbroke Halliday, James Pertances Pertances Halliday, James Springtown Halliday, James Springtown Halliday, James Springtown Hardman, J A Ottawa Halliday, James Springtown Hardman, J A Ottawa Handman, J A Ottawa Kirby, Jouis Russell	Hartley, Charles	Peterborough.	Junkin, Henry	Marmora.
Hudson, John Lewis. Combermere, Hurdman, William H Ottawa. Hurdman, Johnston, William A Ottawa. Hoppins, Abiram Kingston. Harrison, John Irwin Bobcayeen. Harrison, John Jr. Penebroke, Hawkins, E. Le Breton Flats. Henderson, Charles Bracebidge. Halliday, Frank Penetanguishene Harrison, John Arbura Baysville. Harrison, John Arbura Baysville. Henderson, Athur. Baysville. Henderson, Athur. Baysville. Henderson, Arbur. Baysville. Hogg, W. J. North Bay. Howard, James M. Sutton West. Hawkins, Walter Pemboke. Hawkins, Walter Pemboke. Harrison, John S. Sutton West. Howard, James M. Sutton West. Howard, James Eganville. Howard, James Eganville. Howard, James Eganville. Howard, James Eganville. Howard, Johnston, Frank N. Ottawa. Hall, Charles Johnson, John A. Arnprior. Arphibald M. Savanne. Kenned, Johnston, Frank N. Johnston, Pemborke. Harrison, John John John John Johnston, John A. Arnprior. Callander. Kerby, John M. Savanne. Kerby, John M. Savanne. Kerby, John M. Savanne. Kenned, John John John John John John John John	Hawkins, Henry Charles	Blind River.	Johns, Frank	Nipissing Junet'r
Hurdman, William H. Ottawa. Hoghes, John. North Bay. Howk, R. G. New Liskeard. Holpins, John. North Bay. Hoppins, Abiram Kingston. Hoppins, Densmore Kingston. Johnston, John J. Penbroke. Harrison, John Irwin. Bobcaygeon. Harley, William M. Millbridge. Harrison, John Ir. Pembroke. Hawkins, E. Le Breton Flats. Henderson. Oharles. Bracebridge. Halliday, Frank Parry Sound. Henderson. Oharles. Bracebridge. Halliday, Frank Parry Sound. Harley, William M. Perry Sound. Handlay, James. Springtown. Harley, William, J. A. Ottawa. Kirby, John. Scheef, William, Gunter. Henderson, Arthur. Baysville. Hillis, James M. Sutton West. Kennedy, Timothy. Enterprise. Kennedy, Timothy. Enterprise. Kennedy, Timothy. Enterprise. Kennedy, Timothy. Enterprise. Kennedy, T. J. Arnprior. Hillis, James M. Sutton West. Kenning, Henry. Pembroke. Howard, James Eganville. Homen, Loonard. Baysville. Hamilton, Chas. E Kenora. Henderson, Leonard. Baysville. Hamilton, Chas. E Kenora. Henderson, Leonard. Baysville. Hillis, James M. Savanne. Horne, John T. Fort William A Pembroke. Harris, Dohr, T. Fort William A Pembroke. Harrisn, Dohrt J. Ottawa. Kennedy, John F. Orillia. Hamilton, Chas. E Kenora. Hamilton, Chas.	Hines, Philip Wallace	Huntsville.		
Hughes, John. North Bay. Howe, R. G. New Liskeard. Holferty, Dennis. Eganville. Hamilton, Robert. Kenora. Hoppins, Abiram Kingston. Hoppins, Abiram Kingston. Haystead, John. Parry Sound. Haystead, John. Parry Sound. Harley, William Millbridge. Henderson, John Irwin. Bobcaygeon. Hartley, William. Millbridge. Hartley, William. Hartley, William. Peneboxe. Hartley, William. Hartley, William. Gunter. Howe, Isaac. Fort Frances. Fort Frances. Hardley, James M. Sutton West. Henderson, Arthur. Baysville. Hartley, William. Gunter. Hartley, William. Gunter. Hartley, William. Gunter. Hartley, William. Hartley, William. Hartley, William. Hartley, William. Baysville. Kennedy, James M. Sutton West. Hoste, E. P. Katrine. Hawkins, Stowall J. North Bay. Hoste, E. P. Katrine. Hawkins, Walter. Pembroke. Howard, James Eganville. Kennedy, T. J. Arnprior. Welly, Fredinand. Mattawa. Henderson, Leonard. Baysville. Kennedy, T. J. Arnprior. Welly, Fredinand. Mattawa. Henderson, Leonard. Baysville. Kennedy, T. J. Arnprior. Welly, Jeremiah. Webbwood. Henderson, Leonard. Baysville. Kennedy, Milliam James. Henderson, Leonard. Baysville. Kennedy, Walter. Hamilton, Chas. E. Kenora. Henderson, Leonard. Baysville. Kennedy, John. Pembroke. Hamilton, A. J. Sprage. Living, Edward C. Sebright. Kennedy, John L. Guersborouf, Kingston, Robert. Wisawasa. Hindelett. John S. Parage. Leannoth, Frank A. Toronto. Jakeshon, Robert. Wisawasa. Honson, Tinlay. Bracebridge. Johnston, Archibaid M. Norman. Henderson, James. Johnston, Milliam. A. Parry Sound. Hartley, William. Glard. Henderson, Milliam. Henderson, James. Henderson	Hudson, John Lewis	Otrowe	Johnson, Frank N	Ottawa.
Howe, R. G. New Liskeard Heliefty, Dennis Eganville. Hamilton, Robert Kenora Hoppins, Abiram Kingston. Hoppins, Densmore Kingston. Hoppins, Densmore Kingston. Haystead, John. — Parry Sound. Henderson, John Irwin Bobcaygeon. Harrison, John Jr. Peerborough. Handliday, Frank Parry Sound. Halliday, Frank Parry Sound. Hammond, W. Orillia. Hall, Charles Asa. Penetanguishene Hearl, John Callander. Halliday, James Springtown. Harkins, Stonewall J. Meldrum Bay. Hurdman, J. A. Ottawa. Hawkins, Stonewall J. Meldrum Bay. Hurdman, J. A. Ottawa. Harris, Wm. Jr. Day Mills. Kiehen, D. French River Kennedy, T. J. Arnprior. Henderson, Arthur. Baysville. Howard, James M. Sutton West. Harris, Wm. Jr. Day Mills. Kirky, D. F. Belleville. Howard, James M. Sutton West. Horizon, Arthur. Baysville. Howard, James M. Sutton West. Howard, William Baysville. Howard, James M. Eganville. Howard, James M. Eganville. Howard, James M. Eganville. Howard, James M. Eganville. Howard, William Baysville. Howard, James M. Eganville. Howard, James M. Savanne. Kennedy, John F. Orillia. Henderson, Leonard. Baysville. Howard, James M. Eganville. Howard, James M. Eganville. Howard, William Baysville. Howard, William Baysville. Howard, William Baysville. Howard, William A. Pembroke. Hamilton, Robert J. Ottawa. Rennedy, John F. Orillia. Kennedy, John P. Orillia. Kennedy, John P. Pembroke. Hamilton, Robert J. Ottawa. Kennedy, John D. Pembroke. Hamilton, A. J. Sprage. Hrving, Edward C. Sebright. Kennedy, John Burk's Falls.	Hughes John	North Bay	Johnson S M	
Hellerty, Dennis. Eganville. Hamilton, Robert. Kenora. Hoppins, Abiram Kingston. Hoppins, Abiram Kingston. Haystead, John. Parry Sound. Henderson, John Irwin. Bobcaygeon. Hartley, William. Millbridge. Higgins, John C. Peterborough. Hartley, William. Millbridge. Harrison, John Jr. Pembroke. Hawkins, E. Le Breton Flats. Henderson. Charles. Bracebridge. Halliday, Frank Parry Sound. Hall, Charles Asa. Penetanguishene Hearl, John. Callander. Howe, Isaac. Fort Frances. Halliday, James. Springtown. Hurdman, J. A. Ottawa. Hundland, J. A. Ottawa. Hunderson, Arthur. Baysville. Henderson, Arthur. Baysville. Hawkins, Walter. Pembroke. Howard, William. Baysville. Howard, James. Eganville. Howard, James. Eganville. Howard, William. Baysville. Howard, James. Eganville. Howard, James. Eganville. Howard, William. Baysville. Henderson, Leonard. Baysville. Kennedy, John. Pembroke. Herring, Edward C. Sebright. Hawkins, William. A. Zender Galten Penebroke. Herring, Edward C. Kenora. Kennedy, John. Pembroke. Herring, Edward C. Kenora. Kennedy, John. Pembroke. Kennedy, John. Buckingham, Leanoth, Frank A. Toronto. Johnston, Archibald M. Norman. Parry Sound. Kennedy, John. Huntsville. Spanish. Johnston, Archibald M. Norman. Parry Sound. Kernedy, Gobert. Wasawas. Pembroke. Kennedy, John. Pembroke. K	Howie, R. G.	New Liskeard.	Jones, Frederick James	Flinton.
Hamilton, Robert. Kenora. Hoppins, Abiram Kingston. Hoppins, Densmore. Kingston. Haystead, John. Parry Sound. Henderson, John Irwin Bobcaygeon. Hartley, William Millbridge. Higgins, John C. Peterborough. Harrison, John Jr. Pembroke. Henderson. Charles. Bracebridge. Halliday, Frank. Parry Sound. Hammond, W. Orillia. Hall, Charles Asa. Penetanguishene. Hearl, John. Callander. Howe, Isaac. Fort Frances. Halliday, James. Springtown. Hardman, J. A. Ottawa. Hardman, J. A. Ottawa. Hardman, J. A. Hardward, William Baysville. Howard, William Baysville. Howard, William Baysville. Howard, James. E. E. Kenora. Kennedy, T. J. Arnprior. Henderson, Arthur Baysville. Howard, James. E. E. Roora. Kennedy, T. J. Baysville. Howard, James. E. E. Kenora. Kennedy, T. J. Arnprior. Henderson, Leonard. Baysville. Howard, James. E. E. Keora. Kennedy, T. J. Baysville. Henderson, Leonard. Baysville. Kennedy, William. Baysville. Henderson, Leonard. B	Helferty, Dennis	Eganville.	Johnston, William A	Castleford.
Hoppins, Abiram Kingston. Hapytes, Densmore. Kingston. Haystead, John Parry Sound. Henderson, John Irwin Bobcaygeon. Hartley, William Millbridge. Henderson, John Irwin Millbridge. Harrison, John Jr. Pembroke. Hawkins, E. Le Breton Flats. Henderson. Charles. Bracebridge. Halliday, Frank. Parry Sound. Halliday, Frank. Parry Sound. Halliday, Frank. Parry Sound. Halliday, Frank. Parry Sound. Halliday, Frank. Penetanguishene Hearl, John. Callander. Kennedy, Robert, Marmora Marmond, W. Orilla. Halliday, James. Springtown. Hurdman, J. A. Ottawa. Springtown. Hurdman, J. A. Ottawa. Springtown. Hundman, J. A. Ottawa. Springtown. Hundman, J. A. Ottawa. Henderson, Arthur. Baysville. Henderson, Arthur. Baysville. Henderson, Arthur. Baysville. Howard, James. Eganville. Howard, William Baysville. Howard, James. Eganville. Howard, James. Eganville. Howard, James. Eganville. Howard, William Baysville. Howard, James. Eganville. Howard, James. Eganville. Howard, James. Eganville. Howard, William Baysville. Kellet, Fred. Keewatin. Kellet, Fred. Keewatin. Howard, William Baysville. Kellet, Fred. Keewatin. Kenning, Napoleon. Mattawa. Henderson, Leonard. Baysville. Kennedy, Valter. Arnprior. Harwing, Edward C. Sebright. Hawkins, William A. Pembroke. Kennedy, John B. Arnprior. Harwing, Edward C. Sebright. Kennedy, John B. Geenboroug, Marmora. Kennedy, John	Hamilton, Robert	Kenora.		
Haystead, John. Parry Sound. Henderson, John Irwin. Bobcaygeon. Hartley, William Millbridge. Henderson, John Jr. Petrborough. Harrison, John Jr. Pembroke. Harrison, John Jr. Pembroke. Hawkins, E. Le Breton Flats. Henderson. Charles. Bracebridge. Halliday, Frank. Parry Sound. Hammond, W. Orillia. Kerby, John. Callander. Halliday, Frank. Parry Sound. Hall, Charles Asa. Penetanguishene Hearl, John. Callander. Kone, Stonewall J. Meldrum Bay. Hurdman J. A. Ottawa. Hurdman J. A. Weldrum Bay. Hinochcliffe, William. Gunter. Henderson, Arthur. Baysville. Harris, Wm. Jr. Day Mills. Kirby, D. F. Belleville. Kennedy, T. J. Arnprior. Kenning, Henry. Pembroke. Harris, Wm. Jr. Day Mills. Kirby, D. F. Belleville. Kelly, Jeremiah. Suduwa. Howard, James. Eganville. Howard, William Baysville. Hamilton, Chas. E. Kenora. Henderson, Leonard. Baysville. Harris, Emo. Harring, Edward C. Sebright. Hawkins, William A. Pembroke. Kenr, G. Gallendar. Kennedy, John. Pembroke. Kenry, Thos. H. Parry Sound. Kennedy, John. Pembroke. Kenry, Thos. H. Parry Sound. Kennedy, John. Pembroke. Kenry, John B. Arnprior. Kennedy, John. Pembroke. Kenry, John B. Gersten Dind River. Hall, Samuel S. Marmora. Kennedy, John L. Baysville. Kennedy, John B. Bark's Falls. Kennedy, John L. Bark's Falls. Kennedy, John L. Bark's Falls. Kennedy, John L. Bark's Falls. Kennedy, John B. Bark's Falls. Kennedy, John L. Bark's Falls. Kennedy, John B. Bark's Falls. Kennedy, Joh	Hoppins, Abiram	Kingston.		
Henderson, John Irwin Hartley, William Hillioridge, Higgins, John C. Peterborough. Harrison, John Jr. Pembroke. Harrison, John Jr. Pembroke. Harrison, John Jr. Hall Charles Handled Pray Frank Hall Charles Asa. Penetanguishene Hearl, John. Callander. Howe, Isaac. Howe, Isaac. Halliday, James. Harris, Wm. Hurdman, J.A. Oottawa. Harris, Wm. Henderson, Arthur. Howard, William Hoxe, E. P. Hawkins, Walter Pembroke. Harris, Wm. Jr. Hoxe, E. P. Hawkins, Walter Pembroke. Harris, Wm. Jr. Hoxel, E. P. Hawkins, Walter Pembroke. Harris, Wm. Jr. Hoxel, E. P. Hawkins, Walter Pembroke. Harris, Wm. Jr. Hoxel, C. Peterborough. Hamilton, Chas. E. Henderson, Charlard. Hamilton, Chas. E. Henderson, Charlard. Hamilton, Chas. E. Henderson, Charlard. Hamilton, Robert J. Hothes, Callendar Hamilton, Robert J. Hawkesbury Hardhan, J. W. Horden, John F. Hawkesbury Hardhan, W. R. Hill, Ernest L. Hawkesbury Hall, Samuel S. Harmis, Wm. Hall, Samuel S. Harmis, Wm. Hall, Samuel S. Harmis, Wm. Hall, Charles Barron. Haseleton, Constantine Killaloe. Hawkins, William A. Pembroke. Kirby, Louis Russell Kerby, John. Kennedy, Tohn. Kenney, Thou. Kirk, Henry Krich, Henr	Hoppins, Densmore	Kingston.	James, Martin	The Flats.
Hartley, William. Millbridge. Higgins, John C. Peterborongh. Harrison, John Jr. Pembroke. Le Breton Flats Henderson. Charles Bracebridge. Halliday, Frank Parry Sound. Orillia. Hammond, W. Orillia. Penetanguishene Hearl, John. Callander. Howe, Isaac. Fort Frances. Springtown. Hurdman, J. A. Ottawa. Fort Frances. Hurdman, J. A. Ottawa. Kinky, John. Martwa. Halliday, James. Springtown. Hurdman, J. A. Ottawa. Hawkins, Stonewall J. Meldrum Bay. Hellike, William Gunter. Baysville. Harris, Wm. Jr. Day Mills. Horsie, E. P. Katrine. Hawkins, Walter. Pembroke. Harris, Wm. Jr. Day Mills. Howard, James. Eganville. Howard, William Baysville. Howard, William A Pembroke. Henderson, Leonard Baysville. Henderson, Leonard Baysville. Henderson, Leonard Baysville. Hamilton, Robert J. Ottawa. Kennedy, Walter. Arnprior. Hatch, J. W. Dryden. Hartman, W. R. Blind River. Hawkesbury. Hall, Samuel S. Marmora. Kennedy, Walter. Arnprior. Kennedy, John B. Arnprior. Kennedy, John B. Arnprior. Kennedy, John B. Arnprior. Kennedy, John B. Burk's Falls. Kennedy, John W. Ottawa. Kennedy, John S. Parry Sound. Kennedy, John S. Parry Sound. Leannoth, Francis. Arnprior. Johnsoon, Thomas. Bobcaygeon. Johnston, Archibald M. Norma				
Higgins, John C. Peterborough. Harrison, John Jr. Pembroke. Hawkins, E. Le Breton Flats Henderson. Charles Bracebridge. Halliday, Frank. Parry Sound. Hammond, W. Orillia. Hall, Charles Asa. Penetanguishene Hearl, John. Callander. Howe, Isaac. Fort Frances. Halliday, James. Springtown. Hurdman, J. A. Ottawa. Hawkins, Stonewall J. Meldrum Bay. Hinchcliffe, William Gunter. Henderson, Arthur. Baysville. Henderson, Arthur. Baysville. Howard, James M. Sutton West. Hawkins, Walter Pembroke. Howard, James. Eganville. Howard, James. Eganville. Howard, William Baysville. Henderson, Leonard. Baysville. Hender	Hertley William	Millbridge		
Harrison, John Jr. Pembroke. Hawkins, E. Le Breton Flats. Henderson, Charles Bracebridge. Halliday, Frank. Parry Sound. Halliday, Frank. Parry Sound. Halliday, Frank. Penetanguishene Hearl, John. Callander. Howe, Isaac. Fort Frances. Howe, Isaac. Fort Frances. Halliday, James. Springtown. Hurdman, J. A. Ottawa. Hurdman, J. A. Ottawa. Hurdman, J. A. Ottawa. Hillis, James M. Sutton West. Henderson, Arthur. Baysville. Henderson, Arthur. Baysville. Henderson, Arthur. Day Mills. Hogg, W. J. North Bay. Hogg, W. J. North Bay. Howard, William Bayswille. Howard, William Bayswille. Howard, James. Eganville. Howard, James. Eganville. Howard, James. Eganville. Howard, William Baysville. Howard, William Baysville. Homederson, Leonard Baysville. Henderson, Leo	Higgins John C	Peterborongh		
Hawkins, E. Le Breton Flats Henderson, Charles. Bracebridge. Kehneddy, Trank. Parry Sound. Orillia. Kennedy, Robert, Marmora Ottawa. Hall, Charles Asa. Penetanguishene Hearl, John Callander. Korty, Louis Russell. Ottawa. Halliday, James. Springtown. Hurdman, J. A. Ottawa. Kirby, Louis Russell. Ottawa. Halliday, James. Springtown. Hurdman, J. A. Ottawa. Hawkins, Stonewall J. Meldrum Bay. Henderson, Arthur. Baysville. Henderson, Arthur. Baysville. Kennedy, Timothy. Enterprise. Kirk, Henry. Trenton. Ottawa. Kinsella, Michael Pierce. Trenton. Kitchen, D. French River. Kelly, Jeremiah. Sudbury. Hineholiffe, William. Gunter. Kelly, Jeremiah. Sudbury. Hillis, James M. Sutton West. Harris, Wm. Jr. Day Mills. Kirby, D. F. Belleville. Kennedy, T. J. Arnprior. Hillis, James M. Sutton West. Hawkins, Walter. Pembroke. Kelly, D. F. Belleville. Kirk, William James. Eganville. Kelly, Michael J. Baysville. Kelly, Michael J. Baysville. Kelly, D. F. Belleville. Kirk, William James. Webbwood. Kerr, E. G. Thessalon. Moronan. Kean, John F. Orillia. Kennedy, Drival Wesley. Trenton. King, Napoleon. Mattawa. Kennedy, Dorival Wesley. Trenton. Hamilton, Robert J. Ottawa. Kennedy, Walter. Arnprior. Hawkins, William A. Pembroke. Kennedy, Walter. Arnprior. Hawkins, William A. Pembroke. Kennedy, Walter. Arnprior. Harbon, A. J. Sprage. Kennedy, Sylvester. Buckingham, Hassleton, Constantine. Killaloe. Kennedy, Walter. Arnprior. Kennedy, John. Pembroke. Kennedy, John. Pembroke. Kennedy, Sylvester. Buckingham, Hamilton, A. J. Sprage. Kennedy, Sylvester. Brule Lake. Kennedy,	Harrison, John Jr.	Pembroke.	l lionas	Toru Trances.
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Hammond, W. Orillia. Hall, Charles Asa. Penetanguishene Hearl, John Callander. Howe, Isaac. Fort Frances. Halliday, James Springtown. Hurdman, J. A. Ottawa. Hawkins, Stonewall J Meldrum Bay. Hillie, James M. Sutton West. Harris, Wm. Jr. Day Mills. Howard, William Baysville. Howard, James Eganville. Howard, James Eganville. Howard, William Baysville. Horone, John T. Fort William. Hamilton, Chas E Kenora. Henderson, Leonard Baysville. Henderson, Elamy Callendar. Horing, Edward C. Sebright. Harris, Wm. Paris. Henderson, Constantine Kirk, Perry. Horing, Thos. H. Parry Sound. Lingsand, W. P. Ottawa. Kennedy, T. J. Arnprior. Kelly, Ferdinand. Mattawa. Kennedy, T. J. Arnprior. Kelly, Ferdinand. Mattawa. Kenning, Henry. Pembroke. Kirky, D. F. Belleville. Kirky, Milton. Oottawa. Kellett, Fred. Keewatin. Kellett, Fred. Keewatin. Kellt, William James. Webbwood. Thessalon. Mattawa. Kern, E. G. Thenton. Mattawa. Kerry, E. G. Thenton. Kirchen, D. French River Kelly, Jeremiah. Kelly, Jeremiah. Kelly, Ferdinand. Mattawa. Kenning, Henry. Pembroke. Kirky, D. F. Belleville. Kirky, D. F. Belleville. Kirky, William James. Webbwood. Keewatin. Kellett, Fred. Keewatin. Keewatin. Kellett, Fred. Keewatin. Keewatin. Kellett, Fred. Keewatin. Keentie, John F. Orillia. Keery, E. P. Cret. Kitchen, D. French River Kelly, Jeremiah. Kel	Henderson, Charles	Bracebridge.		
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Howe, Isaac. Fort Frances. Knox, Milton. Ottawa. Cottawa. Springtown. Cottawa. Cottawa.			Kennedy, Timothy	Enterprise.
Halliday, James. Springtown. Hurdman, J. A. Ottawa. Kitchen, D. French River Hawkins, Stonewall J. Meldrum Bay. Henderson, Arthur. Bayswille. Henderson, Arthur. Bayswille. Hogg, W. J. North Bay. Hosaie, E. P. Katrine. Yembroke. Howard, James. Eganville. Howard, William. Baysville. Howard, William. Baysville. Homore, John T. Fort William. Henderson, Leonard. Baysville. Hawkins, William A. Pembroke. Herning, Edward C. Sebright. Kennedy, Walter. Arnprior. Heartman, W. R. Blind River. Hall, Samuel S. Marmora. Hamilton, A. J. Sprage. Hamilton, A. Pearry Sound. Hamilton, A. Hamilton, A. Hamilton, A. J. Sprage. Hamilton, A. Hamilto				
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Hinchcliffe, William Gunter Henderson, Arthur Baysville Kennedy, T. J. Arnprior. Hillis, James M. Sutton West. Day Mills. North Bay. Hoxie, E. P. Katrine Hawkins, Walter Pembroke. Eganville Kellet, Fred Keewatin. Howard, James Eganville Kellet, Fred Keewatin. Howard, William Baysville Kirky, Milliam James Webbwood Hogan, Enos W Savanne. Fort William. King, Napoleon Mattawa. Henderson, Leonard Baysville. Kennedy, T. J. Arnprior. Kennedy, Milliam James Webbwood Kerr, E. G. Thessalon Mattawa. Hamilton, Chas. E Kenora. Kean, B. F. Orillia. Kemp, Orval Wesley. Trenton. Callendar Kirk, Charles Barron Queensboroug Kingsland, W. P. Ottawa. Hawkins, William A Pembroke. Henring, Edward C. Sebright. Kennedy, John. Pembroke. Hoard, Wm. Paris. Emo. Hatch, J. W. Dryden. Hoard, Wm. Paris. Emo. Hartman, W. R. Blind River. Hall, Samuel S. Marmora. Hawkesbury. Hall, Samuel S. Marmora. Kearnan, Edward Blind River. Hall, Samuel S. Marmora. Kearnan, Edward Blind River. Hall, Samuel S. Marmora. Kearnan, Edward Blind River. Kennedy, John W. Ottawa, Irving, Thos. H. Parry Sound. Kelly, James F. Trout Creek. Ruffing, Thos. H. Parry Sound. Kelly, James F. Trout Creek Ruffing, Dohnson, Ralph E. Port Arthur. Johns, Frank A. Toronto. Brechin. Johnson, Finlay. Bracebridge. Johnston, Archibiald M. Norman.	Hawkins, Stonewall J	Meldrum Bay.	Kelly, Jeremiah	Sudbury.
Hillis, James M. Sutton West. Harris, Wm. Jr. Day Mills Kirby, D. F. Belleville. Hogg, W. J. North Bay. Hoxie, E. P. Katrine Hawkins, Walter Pembroke. Howard, James. Eganville. Howard, William Baysville. Horne, John T. Fort William. Hamilton, Chas. E. Kenora. Henderson, Leonard. Baysville. Hounderson, Leonard. Baysville. Henderson, Leonard. Callendar. Hamilton, Robert J. Ottawa. Hawkins, William A. Pembroke. Herring, Edward C. Sebright. Hoard, Wm. Paris. Emo. Hatch, J. W. Dryden. Hatch, J. W. Dryden. Hatch, J. W. Blind River. Hall, Samuel S. Marmora. Hawkesbury. Hall, Samuel S. Marmora. Hawilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irving, Thos. H. Parry Sound. Johnson, Finlay. Bracebridge. Johnston, Robert. Victoria Harbor. Johnson, Finlay. Bracebridge. Johnson, Thomas. Bobcaygeon. Johnson, Thomas. Bobcaygeon. Johnson, Thomas. Bobcaygeon. Joneson, Robert. Lee, James. Wishama. Pembroke. Kenning, Henry. Pembroke. Kirkp, Lindsay. Kean, John F. Kellett, Fred. Keewatin. Kellett, Fred. Keeltt, Fred. Kellett, Fred. Keewatin. Kellett, Fred. Keeltt, Fred. Kellett, Fred. Keewatin. Kellett, Fred. Keewatin. Kellett, Fred. Keeltt, Fred. Keewatin. Kellett, Fred. Keeltt, Fred. Keewatin. Kellett, Fred. Keeltt, Fred. Kellett, Fred. Keeltt, Fred. Keewatin. Kellett, Fred. Keeltt, Fred. Keewatin. Kellett, Fred. Keeltt, Fred. Keenstin. Kellett, Fred. Keeltt, Fred. Severn Bridg. Lamnoth, Francis. Arnprior. Lee, James. War	Hinchcliffe, William	Gunter.	Kelly, Ferdinand	Mattawa.
Harris, Wm. Jr. Day Mills. Kirby, D. F. Belleville. Hoxie, E. P. Katrine. Pembroke. Hawkins, Walter. Pembroke. Howard, James. Eganville. Kelly, Michael J. Baysville. Kolly, Michael J. Baysville. Kelly, Michael J. Baysville. Kirk, William James. Webbwood. Kerr, E. G. Thessalon. Mattawa. Hamilton, Chas. E. Kenora. Kean, B. F. Orillia. Kemp, Orval Wesley. Trenton. William. Henderson, Leonard. Baysville. Kemp, Orval Wesley. Trenton. Kirk, Charles Barron. Queensboroug. Kingsland, W. P. Ottawa. Kerr, John B. Arnprior. Kernedy, Walter. Arnprior. Kennedy, John. Pembroke. Herring, Edward C. Sebright. Kennedy, John. Pembroke. Hoard, Wm. Paris. Emo. Blind River. Hawkesbury. Hall, Samuel S. Marmora. Kearney, Michael John Buckingham, Hasleton, Constantine. Killaloe. Kendrick, John L. Buckingham, Hasleton, Constantine. Killaloe. Kendrick, John L. Burk's Falls. Kennedy, John W. Ottawa. Kendrick, John L. Burk's Falls. Kennedy, Syloster. Brule Lake. Kennedy, Syloster. Brule Lake. Kennedy, Syloster. Brule Lake. Kennedy, Daniel J. Spanish. Johnson, Finlay. Bracebridge. Johnson, Finlay. Bracebridge. Johnson, Thomas. Bobcaygeon. Lloyd, Alfred. Severn Bridg. Lawrie, Frank A. Parry Sound.	Henderson, Arthur	Baysville.	Kennedy, T. J.	Arnprior.
Hogg, W. J. North Bay. Hoxie, E. P. Katrine Hawkins, Walter. Pembroke. Howard, James. Eganville. Howard, William Baysville. Horne, John T. Fort William. Hamilton, Chas. E Kenora. Henderson, Leonard. Baysville. Hamilton, Robert J. Ottawa. Hawkins, William A. Pembroke. Herring, Edward C. Sebright. Hoard, Wm. Paris. Emo. Hatthan, W. R. Blind River. Hall, Samuel S. Marmora. Haselton, Constantine Killaloe. Haselton, Constantine Killaloe. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Kirk, Ariles Ken, John E. Kelly, Michael J. Baysville. Ken, Ken, Charles Barron Queensboroug. Kirk, William James. Webbwood. Hessalon. Kean, B. F. Orillia. Kenp, Orval Wesley. Trenton. Kirk, Charles Barron Queensboroug. Kirk, William James. Webbwood. Hessalon. Kean, B. F. Orillia. Kenp, Orval Wesley. Trenton. Kirk, Charles Barron Queensboroug. Kirk, William James. Webbwood. Kory, William James. Webbwood. Kenr, E. G. Thessalon. Kenp, Orval Wesley. Trenton. Kirk, Charles Barron Queensboroug. Kirk, William James. Webbwood. Hossalon. Kenp, Orval Wesley. Trenton. Kenp, Orval Wesley. Trenton. Kirk, Charles Barron Queensboroug. Kirk, William James. Kelly, Michael J. Kenp, Orval Wesley. Kenp, Orval			Kenning, Henry	Pembroke.
Hoxie, E. P. Katrine. Hawkins, Walter. Howard, James Eganville. Howard, William Baysville. Horne, John T. Fort William. Hamilton, Chas. E. Kenora. Henderson, Leonard Henderson, Leonard Hamilton, Robert J. Ottawa. Hawkins, William A. Pembroke. Hoard, Wm. Paris Hoard, Wm. Paris Hoard, Wm. Paris Hattman, W. R. Hall, Samuel S. Hamilton, A. J. Hawkesbury. Hall, Samuel S. Hamilton, A. J. Hawkesbury. Hall, Samuel S. Hamilton, A. J. Hawkesbury. Hasleton, Constantine Killaloe. Kenra, John F. Kellett, Fred Keewatin. Kellty, Michael J. Baysville. Kellty, Michael J. Baysville. Kellty, Michael J. Baysville. Kellett, Fred Keewatin. Kellty, Michael J. Baysville. Kirk, William James Webbwood. King, Napoleon Mattawa. Kean, B. F Orillia. Keeny, Natheal J. Baysville. Kean, B. F. Orillia. Keiltt, Fred Kean, B. F. Orillia. Kelltt, Fred Keltt, William James Webbwood. Kean, B. F. Orillia. Kean, B.	Harris, Wm. Jr	Day Mills.	Kirby, D. F	Belleville.
Hawkins, Walter. Pembroke. Beganville. Beganville. Welbuword, James. Eganville. Howard, William Baysville. Hogan, Enos W. Savanne. Horne, John T. Fort William. Kerr, E. G. Thessalon. Mattawa. Henderson, Leonard. Baysville. Kemp, Orval Wesley. Trenton. Hunter, Thos. Callendar. Hawkins, William A. Pembroke. Hawkins, William A. Pembroke. Herring, Edward C. Sebright. Hoard, Wm. Paris. Emo. Hoard, Wm. Paris. Emo. Blind River. Hall, Samuel S. Marmora. Hawilton, A. J. Spragge. Kendrick, John Buckingham, Hasleton, Constantine. Killaloe. Kennedy, Wilchael John Burk's Falls. Kennedy, John Burk's Falls. Kennedy, John Cottawa, Kearnan, Edward. Blind River. Kearney, Michael John Burk's Falls. Kennedy, John Cottawa, Kendrick, John Burk's Falls. Kennedy, John W. Ottawa, Kelly, James F. Trout Creek. Kennedy, Sylvester. Brule Lake. Kennedy, John W. Ottawa, Kennedy, Sylvester. Brule Lake. Kennedy, Daniel J. Spanish. Spanish. Spanish. Sovern Bridge. Johnston, Ralph E. Port Arthur. Johnson, Frank A. Toronto Jackson, Robert. Brechin. Johnson, Finlay. Bohnson, Thomas. Bobcaygeon. Johnson, Archibald M. Norman.	Hovie E. P.	Katrina	Keen John F	Orillia
Howard, James Eganville. Howard, William Baysville. Hogan, Enos W Savanne. Horne, John T Fort William. Hamilton, Chas. E Kenora. Henderson, Leonard Baysville. Hunter, Thos. Callendar Callendar Hamilton, Robert J Ottawa. Hawkins, William A Pembroke. Herring, Edward C. Sebright. Hoard, Wm. Paris Emo. Hartman, W. R. Blind River. Hall, Ernest L. Hawkesbury. Hall, Samuel S. Marmora. Hamilton, A. J Spragge. Irving, Thos. H Parry Sound. Irving, Thos. H Parry Sound. Irving, Edward C Kenora. Irving, Edward C Kenora. Irving, Thos. H Parry Sound. Irving, Frank A Trout Creek Rennedy, John W Ottawa, Kelly, James F Trout Creek Rennedy, Sylvester Brule Lake. Kennedy, Daniel J Spanish. Irving, Thos. H Huntsville. Irving, Frank A Trout Creek Rennedy, Daniel J Spanish. Irving, Frank A Severn Bridg. Irving, Frank A Port Arthur. Irving, Frank A Severn Bridg. Irving, Frank A Severn				
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Horne, John T. Kenora. Kenora. Baysville. Callendar. Ottawa. Hamilton, Robert J. Ottawa. Herring, Edward C. Sebright. Hoard, Wm. Paris. Emo. Hartman, W. R. Blind River. Hall, Samuel S. Marmora. Haselton, Constantine. Killaloe. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irving, Thos. H. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Irving, Edward C. Spragk. Irving, Edward C. Spragk. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Irving, Frank A. Toronto. Jackson, Robert. Bracebridge. Johnson, Finlay. Johnson, Finlay. Johnson, Thomas. Bobcaygeon. Johnson, Thomas. Bobcaygeon. Johnson, Thomas. Bobcaygeon. Johnson, Archibald M. Norman. Sking, Napoleon Mattawa. Kean, B. F. Orillia. Hkean, B. F. Orillia. Hkean, B. Frank A. Strappior. Mattawa. Kean, B. F. Orillia. Hkean, B. Frenton. Kirk, Charles Barron. Queensboroug Ottawa. Trenton. Kirk, Charles Barron. Queensboroug Ottawa. Trenton. Kirk, Charles Barron. Queensboroug Ottawa. Kennedy, W. P. Ottawa. Trenton. Kirk, Charles Barron. Queensboroug Ottawa. Kennedy, W. P. Ottawa. Trenton. Kirk, Charles Barron. Queensboroug Ottawa. Kennedy, W. P. Ottawa. Arnprior. Wisawasa. Hingsland, W. P. Ottawa. Kennedy, John B. Marnora. Kennedy, John B. Marnora. Kennedy, John M. Fesserton. Wisawasa. Hindsland, W. P. Ottawa. Kennedy, John Burk's Falls. Kennedy, John M. Suckingham, Burk's Falls. Kennedy, John W. Ottawa, Kelly, James F. Trout Creek. Kennedy, Sylvester. Brule Lake. Barwick. Kennedy, Sylvester. Brule Lake. Barwick. Kennedy, Daniel J. Spanish. Spanish. Spanish. Spanish. Severn Bridge. Warren. Lloyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound. Kennedy, John B. Kennedy, John B. Matawa. Trenton. Mitawa. Kean B. Arnprior. Marton. A	Howard, William	Baysville.		
Hamilton, Chas. E. Kenora. Baysville. Keinp, Orval Wesley. Trenton Queensboroug Kingsland, W. P. Ottawa. Kerr, John B. Arnprior. Arnprior. Kennedy, John. Pembroke. Kennedy, John. Pembroke. Kennedy, John B. Burk's Falls. Kendrick, John B. Burk's Falls. Kennedy, John B. Kendrick, John B. Burk's Falls. Kennedy, John B. Burk's Falls. Kennedy, John B. Kendrick, John B. Burk's Falls. Kennedy, John B. Arnprior. Kennedy, John B. Arnprior. Kennedy, John B. Kendrick, John B. Kendrick, John B. Kennedy, John B. Kendrick, John B.	Hogan, Enos W	Savanne.	Kerr, E. G	Thessalon.
Henderson, Leonard. Baysville. Hunter, Thos. Callendar. Hamilton, Robert J. Ottawa. Hawkins, William A. Pembroke. Herring, Edward C. Sebright. Hatch, J. W. Dryden. Hartman, W. R. Blind River. Hall, Samuel S. Marmora. Hasleton, Constantine. Killaloe. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irwin, Eli. Kenora. Irving, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Bracebridge. Johnston, Thomas. Bobcaygeon. Johnson, Thomas. Bobcaygeon. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Bembroke. Kern, Orval Wesley. Trenton. Kirk, Charles Barron. Queensboroug Ottawa. Kingsland, W. P. Ottawa. Kingsland, W. P. Ottawa. Kern, John B. Arnprior. Kennedy, John. Pembroke. Kern, Ohn B. Arnprior. Kennedy, John. Pembroke. Kern, Ohn B. Arnprior. Kennedy, John. Pembroke. Kernedy, John. Pembroke. Kernedy, John. Pembroke. Kernedy, John. Buckingham, Wisawasa. Kearney, Michael John Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John W. Ottawa. Kelly, James F. Trout Creek. Kernahan, George A. Barwick. Kennedy, Sylvester. Brule Lake. Blind River. Kennedy, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kendrick, John L. Bur	Horne, John T	Fort William.		
Hunter, Thos. Callendar. Ottawa. Hamilton, Robert J. Ottawa. Pembroke. Herring, Edward C. Sebright. Hoard, J. W. Dryden. Hartman, W. R. Blind River. Hall, Samuel S. Marmora. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Johnson, Finaly Johnson, Finlay Johnson, Thomas. Bobcaygeon. Johnson, Thomas. Johnson, Thomas. Johnson, Thomas. Johnson, Thomas. Bobcaygeon. Johnson, Archibald M. Norman. Kingsland, W. P. Ottawa. Arnprior. Kennedy, Walter. Arnprior. Kennedy, Walter. Arnprior. Wisawasa. Hindred. Kingston, Robert. Wisawasa. Hindred. Kennedy, John L. Blind River. Kearnan, Edward. Blind River. Kearney, Michael John Buckingham, Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John M. Kelly, James F. Trout Creek. Kauffman, Julias. Kennedy, Sylvester. Blind River. Blind River. Kennedy, Daniel J. Spanish. Spanish. Leannoth, Francis. Arnprior. Lee, James. Warren. Lloyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound. Lawrie, Frank A. Parry Sound.	Hamilton, Chas. E	Kenora.		
Hamilton, Robert J. Ottawa. Hawkins, William A. Pembroke. Herring, Edward C. Sebright. Hatch, J. W. Dryden. Hoard, Wm. Paris. Emo. Hartman, W. R. Blind River. Hill, Ernest L. Hawkesbury. Hall, Samuel S. Marmora. Hasleton, Constantine. Killaloe. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irwing, Edward C. Kenora. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Irving, Frank A. Toronto. Jackson, Robert. Brechin. Johnson, Finlay. Bracebridge. Jones, Albert. Victoria Harbor. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Ottawa. Kerr, John B. Arnprior. Kennedy, John. Pembroke. Kernnedy, John. Pembroke. Kernady, John. Pembroke. Kernady, Walter. Arnprior. Kennedy, John. Buckingham, Burk's Falls. Kendrick, John L. Buckingham, Kelly, James F. Trout Creek. Kennedy, John W. Ottawa, Kelly, James F. Trout Creek. Kernahan, George A. Barwick. Kennedy, Daniel J. Spanish. Kennedy, Daniel J. Spanish. Leannoth, Francis. Arnprior. Lee, James. Warren. Lloyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound.	Hunter Thes	Callender		
Hawkins, William A. Pembroke. Herring, Edward C. Sebright. Hatch, J. W Dryden. Hoard, Wm. Paris Emo. Hartman, W. R. Blind River. Hill, Ernest L Hawkesbury. Hall, Samuel S. Marmora. Hasleton, Constantine. Killaloe. Hamilton, A. J Spragge. Irving, Thos. H. Parry Sound. Irwing, Edward C Kenora. Irving, Edward C Kenora. Irving, Edward C Kenora. Irving, Fank A. Toronto. Jackson, Robert. Brechin. Johnson, Finlay Bracebridge. Johnson, Thomas Bobcaygeon. Johnson, Thomas Bobcaygeon. Johnson, Archibald M. Norman. Pembroke. Kennedy, Walter. Arnprior. Kennedy, John. Pembroke. Kennedy, John. Portant Buckingham, Julias Blind River. Kennedy, John L. Kennedy, John L. Kennedy, John L. Kennedy, Sylvester Brule Lake. Kernahan, George A. Barwick. Kennedy, John L. Buckingham, Julias Blind River. Kennedy, John L. Buckingham, Suckingham, Suckingham, Mearly, John L. Kennedy, John L. Kennedy, John L. Spanish. Kennedy, John L. Buckingham, Julias Blind River. Kearnan, Edward Blind River. Kearnan, Edward Blind River. Kearnan, Edward Blind River. Kearnan, Julias Burk's Falls. Kennedy, John L. Buckingham, Julias Burk's Falls. Kennedy, John L. Spanish. Kearney, Michael John Buckingham, Julias Burk's Falls. Kennedy, John L. Kennedy, John L. Spanish. Kearney, Michael John Buckingham, John L. Kennedy, John L. Spanish. Kennedy, John S. Leanned, John L. Spanish. Kennedy, John S. Leanne	Hamilton Robert J	Ottawa		
Hatch, J. W. Dryden. Hoard, Wm. Paris. Emo. Hartman, W. R. Blind River. Hill, Ernest L. Hawkesbury. Hall, Samuel S. Marmora. Hasleton, Constantine. Killaloe. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irwin, Eli. Kenora. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Bracebridge. Johnson, Finlay Bracebridge. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Dryden. Kennedy, John. Pembroke. Konx, Wm, M. Fesserton. Wisawasa. Kearney, Michael John. Buckingham, Kendrick, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, James F. Trout Creek. Kernahan, George A. Barwick. Kennedy, Sylvester. Brule Lake. Kernahan, George A. Barwick. Kennedy, Daniel J. Spanish. Leannoth, Francis. Arnprior. Wisawasa. Kearney, Michael John. Buckingham, Kendrick, John L. Burk's Falls. Kennedy, John L. Burk's Falls. Kendrick, John L. Surk's Falls. Kendrick, John L. Su	Hawkins, William A	Pembroke.	Kerr. John B	Arnprior.
Hatch, J. W. Dryden. Hoard, Wm. Paris. Hartman, W. R. Blind River. Hill, Ernest L. Hawkesbury. Hall, Samuel S. Marmora. Hasleton, Constantine. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irwin, Eli Kenora. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Irving, Frank A. Toronto. Jackson, Robert. Johnson, Finlay. Johnson, Finlay. Johnson, Thomas. Johnson, Thomas. Johnson, Thomas. Johnson, Thomas. Johnson, Thomas. Johnson, Archivald M. Norman. Dryden. Kennedy, John. Kennedy, John. Kendert. Kearney, Michael John. Kearney, Michael John. Kearney, Michael John. Wisawasa. Kearney, Michael John. Blind River. Kearney, Michael John. Wisawasa. Kearney, Michael John. Wisawasa. Kearney, Michael John. Buckingham, Kendrick, John. Buckingham, Kendrick, John L. Kennedy, John W. Ctawa, Kennedy, Sylvester. Keannedy, John. Kearney, Michael John. Buckingham, Kendrick, John L. Burk's Falls. Kennedy, John W. Ctawa, Kennedy, Sylvester. Keannedy, John W. Ctawa, Kennedy, John W. Ctawa, Kennedy, John W. Ctawa, Kendrick, John L. Kendrick, John L. Burk's Falls. Kennedy, John W. Ctawa, Kearney, Michael John. Buckingham, Kendrick, John L. Burk's Falls. Kennedy, John W. Ctawa, Kearney, Michael John. Kendrick, John L. Burk's Falls. Kennedy, John W. Ctawa, Kearney, Michael John. Kendrick, John L. Kennedy, John W. Ctawain, Kearney, Michael John Burk's Falls. Kendrick, John L. Kennedy, John W. Ctawain, Tesserton. Wisawasa. Leannet L. Leannoth, Francis. Leannoth, Francis. Lee, James.	Herring, Edward C	Sebright.	Kennedy, Walter	Amprior.
Hartman, W. R. Blind River. Hill, Ernest L. Hawkesbury. Hall, Samuel S. Marmora. Hasleton, Constantine. Killaloe. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irwing, Eli Kenora. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Brechin. Johnson, Finlay. Bracebridge. Johnson, Thomas. Bobcaygeon. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Blind River. Kearnan, Edward Blurk's Falls. Kennedy, John L. Burk's Falls. Kennedy, John W. Ottawa, Trout Creek. Kennedy, Sylvester. Brule Lake. Kernahan, George A. Barwick. Kennedy, Daniel J. Spanish. Leannoth, Francis. Arnprior. Lee, James. Warren. Lloyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound.	Hatch, J. W	Drvden.		
Hill, Ernest L. Hawkesbury. Hall, Samuel S. Marmora. Hasleton, Constantine. Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irwin, Eli. Kenora. Irving, Edward C. Kenora. Irving, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Bracebridge. Johnson, Finlay Bracebridge. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Hawkesbury. Marmora. Kearnan, Edward. Blind River. Kearney, Michael John. Burk's Falls. Kendrick, John L. Burk's Falls. Kendrick, John L. Burk's Falls. Kennedy, John W. Ottawa, Trout Creek. Kauffman, Julias. Blind River. Kennedy, John W. Ottawa, Trout Creek. Kennedy, Sylvester. Brule Lake. Barwick. Kehoe, Martin. Huntsville. Spanish. Leannoth, Francis. Arnprior. Uoyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound.	Hoard, Wm. Paris	Emo.		
Hall, Samuel S. Marmora. Hasleton, Constantine. Killaloe. Spragge. Irving, Thos. H. Parry Sound. Irwin, Eli. Kenora. Irving, Edward C. Kenora. Isying, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Bracebridge. Johnson, Finlay Bracebridge. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Marmora. Kearney, Michael John. Buckingham, Kendrick, John L. Burk's Falls. Kennedy, John W. Ottawa, Kennedy, James F. Trout Creek. Kennedy, Sylvester. Brule Lake. Kernahan, George A. Barwick. Kennedy, Daniel J. Spanish. Leannoth, Francis. Arnprior. Uee, James. Warren. Lloyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound.	Hartman, W. R	Blind River.	Kingston, Robert.	Wisawasa.
Hasleton, Constantine. Killaloe. Hamilton, A. J. Spragge. Kendrick, John L. Burk's Falls. Irving, Thos. H. Parry Sound. Irwin, Eli. Kenora. Irving, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Bracebridge. Johnson, Finlay. Bracebridge. Johnson, Thomas. Bobcaygeon. Johnson, Archibald M. Norman. Kendrick, John L. Burk's Falls. Kendrick, John	Hall Samuel S	Marmore		
Hamilton, A. J. Spragge. Irving, Thos. H. Parry Sound. Irwin, Eli. Kennora. Irving, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Brechin. Johnson, Finlay. Bracebridge. Johnson, Thomas. Bobcaygeon. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Spragge. Kendrick, John L. Burk's Falls. Kennedy, John W. Ottawa, Kelly, James F. Trout Creek. Kauffman, Julias. Blind River. Kennedy, Sylvester. Brule Lake. Kernahan, George A. Barwick. Kennedy, Daniel J. Spanish. Kennedy, John M. Ottawa, Kelly, James F. Trout Creek. Kennedy, Sylvester. Brule Lake. Barwick. Kennedy, Daniel J. Spanish. Leannoth, Francis. Arnprior. Lee, James. Warren. Lloyd, Alfred. Severn Bridg. Lawrie, Frank A. Parry Sound.	Hasleton Constantine	Warmora.		
Irving, Thos. H. Parry Sound. Irwin, Eli. Kenora. Irving, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Bracebridge. Johnson, Finlay Bracebridge. Johnson, Thomas Bobcaygeon. Johnston, Archibald M. Norman. Kennedy, John W. Ottawa, Kelly, James F. Trout Creek. Kauffman, Julias. Blind River. Kauffman, Julias. Blind River. Kennedy, Sylvester. Brule Lake. Barwick. Kehoe, Martin. Huntsville. Spanish. Leannoth, Francis. Arnprior. Lee, James. Warren. Lloyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound.	Hamilton, A. J	Spragge.	Kendrick, John L.	Burk's Falls
Irwing, Thos. H. Parry Sound. Irwin, Eli. Kenora. Irving, Edward C. Kenora. Johnston, Ralph E. Port Arthur. Johns, Frank A. Toronto. Jackson, Robert. Bracebridge. Johnson, Finlay. Bracebridge. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Relly, James F. Trout Creek. Kauffman, Julias. Blind River. Kennedy, Sylvester. Brule Lake. Barwick. Kehoe, Martin. Huntsville. Spanish. Leannoth, Francis. Arnprior. Warren. Lloyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound.		~P	Kennedy, John W	Ottawa.
Irwin, Eli	Irving, Thos. H	Parry Sound.	Kelly, James F	Trout Creek.
Johnston, Ralph E	Irwin, Eli	Kenora.	Kauffman, Julias	Blind River.
Johnston, Ralph E	Irving, Edward C	Kenora.	Kennedy, Sylvester	Brule Lake.
Johns, Frank A	Johnston Ralph E	Port Anthun	Kernahan, George A	Barwick.
Jackson, Robert. Brechin. Johnson, Finlay Bracebridge. Jones, Albert. Victoria Harbor. Johnson, Thomas. Bobcaygeon. Johnston, Archibald M. Norman. Leannoth, Francis. Arnprior. Lee, James. Warren. Lloyd, Alfred. Severn Bridge. Lawrie, Frank A. Parry Sound.	Johns Frank A	Toronto	Kennedy Daniel I	Spanish
Johnson, Finlay Bracebridge. Jones, Albert Victoria Harbor. Johnson, Thomas Bobcaygeon. Johnston, Archibald M Norman. Belocaygeon. Lee, James. Warren. Lloyd, Alfred Severn Bridge. Lawrie, Frank A Parry Sound.	Jackson, Robert	Brechin	ixemicuy, Daniel J	pamen.
Jones, Albert	Johnson, Finlav	Bracebridge.	Leannoth, Francis	Arnprior.
Johnson, ThomasBobcaygeon. Johnston, Archibald MNorman. Bobcaygeon. Lloyd, AlfredSevern Bridge Lawrie, Frank AParry Sound.	Jones, Albert	Victoria Harbor.		
Johnston, Archibald M Norman. Lawrie, Frank A Parry Sound.	Johnson, Thomas	Bobcavgeon.	Lloyd, Alfred	Severn Bridge.
Julien, CharlesTrenton. Latimer, JasFrank's Bay.	Johnston, Archibald M	Norman.	Lawrie, Frank A	Parry Sound.

List of Persons holding Cullers' Licenses.—Continued.

Name.	P.O. Address.	Name.	P.O. Address.
Lemyre, Middey	Campbellford.	Malloy, Mark.	
Lutz, Jacob,	Parry Sound.	Martin, Hugh	Sault Ste. Marie.
Luby, John E Law, Wm. J	Marketay	Miller, R. O	Gravennurst.
Lummis, Daniel		Murray, Frederick	Huntaville
Lowe, W. C		Menzies, Archibald	
Londry, S. C		Manning, James	Trenton.
Lochnan, James		Martin, Philip	Stoco.
Link, Henry W		Malone, Wm. Pat	Ottawa.
Ladarotte, John		Marsh, Esli Terril.	Trenton.
Lochnan, John		Miller, John W	
Lozo, John Loughrin, Lawrence		Muchinbacker, Asa Morris, George F	
Linton, J. H		Murray, George, Jr	
Ludgate, James		Maughan, Joseph	
Lee, Robert		Margach, Wm.J	Port Arthur.
Langford, Mark	Baysville.	Murray, George, Sr	Waubaushene.
Letherby, Edwin	Midland.	Manice, Wm	
Leahy, Francis M	Chapeau, Que.	Murray, Wm	
Langford, Henry Lessard, Philip	Konore	Morgan, Richard J Magee, Thomas Arthur	Kenora.
Lovering, William James		Murdoch, James	Cook's Mills
Lane, Maurice		Mulvahil, Wm	
Lenton, George		Murphy, Arthur	
Lowe, Thos. A		Mayhew, Jacob	
Livingston, Robert M	Huntsville.	Molyneaux, George,	
Londry, William E		Milway, Joseph	Fort William.
Labelle, James	Waltham, Que.	Mackie, Nathan,	
Labelle, Eli	Ottowe	Milne, Archie Murray, James	
Ludgate, Theodore	Peterborough	Moore, James A. E	
Lucas, Frank		Merkley, William A	Ottawa.
Lunam, Duncan		Murphy, Hugh R	Ottawa East.
Lott, George		Murphy, W. J	Arnprior.
Lawrie, John D	Parry Sound.	Murray, William	
Lovering, George Francis		McFarlane, Robert L	
Lucas, R. G LeBlanc, Edmund C.Chapleau		Martin, Edgerton Mathieson, Archie,	Fort Frances
Lavigne, John		Moore, Henry R	
Landell, Charles S		Mickle, Chas. S	
Long, Henry Elisha		Mullen, James	Webbwood.
Lynch, W. H	Collingwood.	Morley, A. W	
Laplante, Francis	Dyng Inlet.	Macdonald, James M	
Lindsay, James Labelle, Michael	Arnorior.	Money, Harry Mather, Allen	Keewatin
Legree, John	Dacre.	Menzies, Alexander	Sault Ste. Marie
Legree, James L	Calabogie.	Munro, Peter P	Commanda.
Leigh, John Chas	Gravenhurst.	Mason, Benjamin	Westmeath.
Lloyd, Edward B		Monaghan, John B	
Lemyre, Bruno	Gravenhurst.	Monaghan, M. J	
Lavelle, Charles H		Mulvihill, John	
Lyons, James Ledwood, Charles		Mulvihill, Michael	
Levelle, Emery	Waltham Sta. O.	Mann, John	
Little, Theo	Kenora.	Marrigan, Richard	Deseronto.
Lehman, Joseph	Stratton Station.	Monaghan, John Dorland	Deseronto.
Lafare, Mark		Matheson, Wm	Chelmsford.
Leach, George	Vermilion Bay.	Munro, Alex. G	Braeside.
Lott, Ángus M La Belle, Ambrose	Kopore	Murphy, Oliver A Mellor, Charles	Port Arthur
La Breen, Douglas,	Kenora	Millions, Harry	Gillies' Depot
Lavelle, Michael J	Blind River.	MacDonell, R. D	Biscotasing.
Lyleton, J. E	Parry Sound	Milne, Fred	Trout Mills

List of Persons holding Cullers' Licenses.—Continued.

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Name.	P.O. Address.	Name.	P. O. Address.
Miller, P. H	Blind River.	McDonald, Roderick	Pembroke.
Munro, Philip	Braeside.	McCormack, Wm	Pembroke.
Mangan, Patrick	Arnprior.	McCreary, William	Arnprior.
Marcil, Peter	Ottawa.	McCuaig, James C	Bryson.
Main, Samuel	Spanish Station.	McColman, Peter	North Bay.
Morley, Charles	Huntsville.	McLeod, James D	Gravenhurst.
Moore, David Henry	Peterborough.	McCrimmon, N. K	Blind River.
Murphy, John	Arnprior.	McCreary, James, Jr	Arnprior.
Mathieson, Daniel	Chelmsford.	McPhee, Hugh	Byng Inlet.
Milne, Wm	Ethel.	McCudden, James	Amprior.
Mangan, Charles	Burk's Falls.	McLachlin, J. A	Aruprier.
Mooney, Lincoln	Orillia.	Macpherson, John	Ottawa.
Mangan, John		McEachren, John A	Gravennurst W.
Mooney, Thomas	Ringston.	McLeod, Dugald	Barry Cound
Mason, Robt. T	Crescondaryot	McClelland, R. H	Campbellford
Moore, Wm. John		McEvoy, Frank	Orillia
Morrison, Donald		McIlroy, John	Madoc
Mutchenbacker, Herman	Rosseau Falls	McNab, Robert J	Parry Sound
Moore, Norman		McFadden, James	
Morley, John R	Kenora.	McIntosh, James G	
Mackay, J. A	Big Forks.	McInnis, Hector D	Bracebridge.
Miller, Robt	Montreal.	McKinnon, Malcolm	Bracebridge.
Mackey, Levi Ralph	Keewatin.	McLean, Daniel	Bracebridge.
Morley, Frank W	Kenora.	McKinnon, Archie J	Bracebridge.
Madden, F. M		McKay, D. C	Baysville.
		McDonald, James	Parry Sound.
McCaw, Joseph E	Tweed.	McPherson, Allan	Longford.
McLaren, Peter	Kenora.	McDonald, James P	French River.
McGregor, Colin F	Kenora.	McFarlane, Jos. C	
McKenzie, Robert	Kenora.	McNabb, Alexander	Thessalon.
McFadyen, A. J	Bracebridge.	McGillivray, Archibald	Port Arthur.
McCaulay, Thos. J	Goulais Bay.	McGrane, Edward	Lindsay.
McDonald, John C	Angenie	McLeod, Donald, Jr	Keewatin.
McKenzie, Alex. E	Ausoma.	McDonald, Hector R McDougall, Duncan	Proceduides
McIntyre, John		McNabb, Alexander D	Warren
McDermott, Jas. E	North Ray	McCormack, John C	
McCrindle, Jas	Sudbury.	McNamara, John	
McGhie, Chas. S	Whitestone.	McGillivray, Duncan D	Algoma Mills.
McGenigal, John H	Whitby.	McIntyre, Daniel A	Klock's Mills.
McCart, Patrick		McNamara, Lewis	Klock's Mills.
McGrath, Thos. B	Peterborough.	McDonald, Sydney C	Mattawa.
McCormick, James J	Trenton.	McGurn, Jno. J	Buckingh'm, Que
McCarthy, Wm	Fenelon Falls.	McKeown, Jno. Joseph	Port Arthur.
McAvoy, Owen	Campbellford.	McNeel, David	Sault Ste. Marie.
McConnell, Lewis	resserton.	McEwan, Andrew	Thessalon.
McMullen, George		McCool, Christopher L	
McNab, Angus	Burnstown.	McCollum, Donald	Arnprior.
McColgan, C. H	Amparion	McDowell, Wm	Uache Bay.
		McConnachie, Roy Stewart	
McCagherty, Robert E McNab, Archie		McDonnell, J. K	Vormilian Par-
McDonald, Malcolm	Spragge.	McDonald, Alex. J	Rainy Ray
McIvor, J. A		McMillan, James	Kenora
McCulloch, M.	Kenora.	McPhee, Ronald	
McDonagh, Rod	Callander.	McKay, George Donner	Dorset.
McManus, James	Arnprior.	McWilliams, Maxwell	2.52500.
McKinley, J. H	Curran.	Theodore	Peterborough.
McPherson, Jas. S	Rama.	McLeod, John	Keewatin.
McKinley, Edward C	Toronto.	McPherson, George	Keewatin.
McClelland, John	Parry Sound.	McDougall, John D	Kenora.
McFarlane, J. W	Cache Bay.	McGregor, Duncan	Burnstown.

List of Persons holding Cullers' Licenses.—Continued.

1	1	11	1
Name.	P.O. Address.	Name.	P.O. Address.
McLean, Peter W	Sand Point.	MacCallum, Alexander	Braeside
McNichol, John	Sudbury.	McRae, Farquhar	Kenora.
McInnis, D. E	Cache Bay.	MacCallum, Albert	Arnprior.
McLaughlin, Samuel	Waubaushene.	McGonigal, John	Arnprior.
McCollman, John	North Bay.	McConachie, John	Huntsville.
McManus, John C	Arnprior.	McKay, D. G	Kenora.
McLean, John	Blind River.	McDonald, James	Peterborough.
McLeod, Norman	Garden River.	McCulloch, John L	Lonsdale.
McLean, James	Blind River.	McConnell, James	Mine Centre.
McNally, J. A	Desbarats.	McIntyre. William John	Port Arthur.
McNabb, Alexander	Arnprior.	McDonald, Allen	Big Forks.
McFarlane, Alexander	Renfrew.	McLay, Albert	Devlin.
McFarlane, J. D	Stewartsville.	McQuarrie, Daniel	Fort Frances.
McFarlane, Duncan	Renfrew.	McNaughton, Daniel	Bracebridge.
McKendry, Wm. B	Arnprior.	McCagherty, William E	Westmeath.
McPhee, Hugh	Rentrew.	McDonald, John D	Mattawa.
McPhee, John	Arnprior.	McCagherty, Joseph T	Westmeath.
McLachlin, Peter	Arnprior.	McAdam, Arch. H	Quyon, Que.
McLachlin, Alexander	Arnprior.	McMurphy, Dugald, Jr	Kenora.
Mackey, Édward	Arnprior.	McCall, Alfred	Kenora.
McEwan, Henry	Detember on the	McRitchie, William	Kenora.
McDonald, Alfred	Feterborough.	McRitchie, Malcolm McDonald, John Harold	Kenora.
McGeary, John J	Gilmour	Medulor William Davis	Rydal Bank.
McDonald, Archibald W	Ougon shorough	McAuley, William Davis	Sault Ste. Marie
McGaw, John Gillen McCauley, Barney	Tranton	McCallum, Thos	Veneral
McDougal, James T	Klock's Mills	McWhinney, Fred	Kenora.
McInenly, Thomas	Onebec One	McKelvie, William	Otton Laka Sta
McBride, Archibald	Arnnrior		
McFarlane, Robert L		Nescott, George	Kenora.
McGowan, Wm	Parry Sound	Newton, Frank	Gravenhurst.
McLachlin, Norman	Arnprior.	Newburn, Wm	Parry Sound.
McDonald, Laughlin	Pendleton.	Niblett, James	Arnprior.
McIvor, William J	Collins' Inlet.	Niblett, Robert	Osceola.
McKee, John P	Sturgeon Falls.	Nevison, Herbert	Kenora.
McGowan, Thomas	Parry Sound.	Nicholson, John	Owen Sound.
McDermot, Patrick	South River.	Newall, John H	Parry Harbor.
McKay, Angus	South River.	Nolan, John	Wistonia Harbar
McDonald, A. J	Longford.	Newton, Charles W	Victoria marbor.
McInnis, Angus D	Gravenhurst.	Nent, Charles Needham, John G	Pokonhom
McKendry, Alexander	Waubaushene.	1	
McGuire, Timothy	North Bay.	Oullette, Joseph P	Cutler.
	Peterborough.	O'Neil, Thomas	Bancroft.
McWilliams, John Bannon		O'Neill, Daniel H. H	Arnprior.
	Westmeath.	O'Leary, Patrick J	Orillia.
Mckendry, Daniel	Arnprior.	Oliver, Charles R	resserton.
MacDonald, D. F	Parry Sound.	Overend, George J	Longiord Mills.
McManus, Thomas J	Ottowo	O'Brien, Andrew	Ottawa.
Macfarlane, David R	Onawa.	O'Brien, Frank G	Arnprior.
McColgan, Edward	Emo	Oliver, J. A Owen, W. J	rort william.
McKay, John	Konoro	O'Connor, John	Wadigoon.
McKittrick, Frank R. F	Konore	Oliver, Darcy	Wahnanitaa
McMichael, Charles	North Seguin	O'Connor, Wm	Noghonging
McIlroy, Thomas Davis	Madoc	O'Neil, James W	North Roy
McDonald, Wm. Henry		O'Donnell, Wm	Penetanonishene
McGaw, Wm. Thomas		Owens, Richard	Rasin Denot
McMillan, L	Callander	O'Reilly, Patrick	Cartier.
McDermott, John L		O'Neill, Mark	Renfrew
McDonald, Chas. M		O'Neill, Mark	Trenton.
McPhee, Benjamin		O'Neill, Patrick	Bancroft.
McGee, John Edward		Orde, Francis W	Kenora.
Macfarlane, Mack		O'Driscoll, Joseph	Sault Ste. Marie.
Maciariane, Mack	Arnprior.	O Driscon, Joseph	oauli oje. Marie

${\bf List\ of\ Persons\ holding\ Cullers'\ Licenses.} \\ -Continued.$

Name.	P.O. Address.	Name.	P. O. Address
igott, John	Fitzroy Harbour.	Rawson, Charles Edgar	
aul, Charles A	Sault Ste. Marie.	Ross, George	Waubashene.
attinson, Thos	Bracebridge.	Roberts, Percy T	Keewatin.
rice, A. E	Arnprior.	Ritchie, Wm. D	Little Current.
resley, J. F	Ashton.	Ramsay, Robert	Arnprior.
ower, James	Bobcaygeon.	Ritchie, J. F.	Arnprior.
atzel, Adolph	Arnprior.	Ritter, Samuel G	Anmic Harbor
launt, William B	Eganville.	Rothera, Charles F	Sturgeon Falls.
launt, Joseph	Eganville.	Ryan, Alfred	Soult Sto Mani
orter, Charles C		Rogers, Fred	
reston, R. E	Kenora. Fergus.	Robertson, John A	
etrie, George Aorien		Robinson, Wm	Roberta.
erry, Pringle K	Byng Inlet, N'th	Reid, Joseph B	Lindsay
urcall, W. G		Ross, Walter M.	
urvis, John	Parry Sound.	Ruttle, H. A	Carleton Place
orter, James	Uphill.	Richards, Benedict	Ottawa.
earson, John James	Lindsay.	Regan, John	Orillia.
enney, Chas. G	Cache Bay.	Russel, Wm	Pembroke.
ennock, James P	Hardwood Lake.	Ramsay, Charles	Sudbury.
urdy, John A	Uxbridge.	Russell, Corsan L	Pembroke.
layfair. R. J	Blind River.	Richards, Henry	Dacre.
aterson, John	Wahnapitae.	Ryan, Wm	
aterson, Alexander	Orillia.	Reid, John P	
arke, James	Gravenhurst.	Ridley, Robert	New Liskeard.
arquette, Oliver	Webbwood.	Riley, Charles W	Hutton House.
almateer, Sherman	Gravenhurst.	Raymond, Morris T	
aget, George	Huntsville.	Rooney, Wm. H	
ounder, Joseph	w stmeath.	Revell, J. O	
ell, Richard D	Arnprior.	Rankin, Anthony	
erry, Frederick	Novem	Ross, Augus	Washage
Paget, Charles Edward Porter, Thomas Robert Mark		Robinson, Edward	Washago.
Countney, E. J	Arnprior	Robinson, Thomas G	Washago.
bunn, David J	Dorgot	Raycroft, William T	Sarnia
Purdy, Geo	Hintonburg	Roberts, Ivor M	Garden River
Playfair, Andrew Wm	Sault Ste. Marie.	Revell, Lionel Oliver	W. Gravenhur
Pipe, Taylor	Hailevbury.	Regan, Judd Patrick	
Pipher, George E	Mowat.	Robins, Etna Rosedale	
endee. David	Parry Sound.	Regan, John Jr	Orillia. ·
Piper, A. J	Blind River.	Ryan, James	Savanne.
Paget, Alfred H	Ahmic Harbor.	Rusk, Oscar W	Cache Bay.
		Robinson, Thos. Geo	Bracebridge.
Quinn, William	Peterborough.	Rooksby, Wm	Campbellford.
Quigley, Hugh	Penetang.	Ramesbottom, Robt	Byng Inlet.
Quirk, Thomas J	Petewawa.	Roy, Lewis	Arnprior.
2.1	177	Riddell, Horace A	
Robertson, D	Kenora.	Rowan, A. L	
Richardson, Frederick George Richards, Richard	Tenton.	Ross, George Joseph	Spragge.
Riddell, Geo. Alexander		noss, George Joseph	Schrieber.
Robertson, Lewis McLean	Duneburch	Smith, M. D	Fort William
Robinson, Wm. F	Bobcaygeon	Scanlan, William	
Reamsbottom, Wm	Mattawa.	Sutherland, D. H	
Richey, Evan	Brentwood.	Spanner, John	Huntsville.
Randall, Lewis G	French River.	Shier, James D	Bracebridge.
Richardson, Charles Marvyn	Trenton.	Spooner, W. R	Katrine.
Rochester, Daniel Baillie		Simpson, Alfred E	
Riddell, James	Ottawa.	Souliere, John B	Ottawa.
Rice, Asa A	Hull, Que.	Shields, James A	Carleton Place
Roberts, T. A	Huntsville.	Spargo, George	Ottawa.
Ross, Andrew		Smyth, W. H	

List of Persons holding Cullers' Licenses.—Continued.

	1		1
Name.	P.O. Address.	Name.	P.O. Address.
Salmon, Alexander C	Baysville.	Scully, Cornelius	Whitney.
Stremer, A	Ottawa.	Savoy, Eutrope	North Bay.
Shields, Frank A	Parry Sound.	Smith, Walter J	Campbellford.
Stapleton, John J	Ogidakie.	Seymour, John J	Whitefish.
Sloan, William H	Fort Frances.	Smith, Alex. R. C	Burk's Falls.
Smyth, Job E	Cache Bay.	Stewart, Richard M	
Sage, Nelson	Muskoka Milis.	Souliere, John H	Canoe Lake
Seymour, Edward	Whitensh.	Smith, Abraim G	
Shaw, Thomas B Swanston, James	Peterborough	Swallow, C. H	
Simpson, William	Hall's Bridge	Strave, A. M Stewart, John	
Sadler, Thomas	Lindsay.	Sullivan, George L	
Smith, Patrick Albert	Norman.	Short, James	
Snaith, Wm. J	Mattawa.	Shaw, Fred'k Jason	
Sinn, William F	Arnprior.		
Sheppard, Wm. Joseph	Waubaushene.	Taylor, Fred L	Parry Sound.
Spears, Milton B	Barry's Bay.	Thomas, Griff J	Thessalon.
Stevenson, Arthur	Peterborough.	Thomson, R. D	
Stein, Paul	Sault Ste. Marie.	Tait, Thomas B	
Shaw, Alfred	Thessalon.	Thornton, W. D	
Sequin, Napoleon	Ampanish Station.	Trussler, Gilbert	Trout Creek
Scrim, Robert	Sudbury	Thompson, Geo. S	Lindsay.
Shaneay, Harry S	Cook's Mills.	Thompson, Geo. S	Callandar.
Smith, Wm	Ottawa.	Thompson, Francis Henry	Nosbonsing.
Stewart, Daniel	Braeside.	Train, A. C	Rowan Mills.
Sheehan, Michael H	Waubaushene.	Turgeon, George	Cook's Mills.
Smith, Sydney H	Bracebridge.	Thayer, William	Sault Ste. Marie
Stewart, James A	Pembroke.	Thompson, Alexander W	Arnprior.
Sproule, Newton H	Schomberg.	Taylor, Thomas G	Arnerior
Simmons, Alex	Port Artnur.	Tucker, Louis A	
Scott, Thomas Smith, Lawrence	W Socioan Mich	Thompson, Daniel	P'rt'ge du F'rt. Q
Shea, Stewart	Campbellford	Thompson, Richard	Kenora.
Sullivan, John	Sault Ste. Marie.	Thompson, Joseph H	Bracebridge.
Sinclair, Finlay	Sudbury.	Taylor, Edward A	Westmeath.
Shiels, Henry F	Cartier.	Tait, Ralph	Arnprior.
Smith. Gideon Ousley	Burk's Falls.	Train, William,	Burk's Falls.
Smith, John Wallis	Thedford.	Turner, Garvin F	North Bay.
Smith, Henry G	Arnprior.	Tilson, Joseph Tuffy, John	Cortice
Story, John A	Ottawa.	Thorpe, Thos	Pombroke
Sweezy, Benjamin	Massey.	Taylor, Chas. E	Gravenhurst.
Sheppard, Charles H Sinclair, Armon D		Tench, Arthur	
Smith, Sidney E	Ottawa.	Tulloch, William A	Sault Ste. Marie
Sleeman, Wni	Rapid River.	Taylor, Alex. M	Burnstown.
Sheeman, Peter F	Loring.	Toner. J. A	P'rt'ge du F'rt. G
Sleeman, Geo	Rapid River.	Thrasher, Henry G	Pembroke.
Sima William K	Sault Ste. Marie.	Tooke, Frank	Bala.
Skahill, William	Blind River.	Thorburn, Donald James	Thesealon.
Shaw, George	rnessaion.	Udy, Dean	French River.
Sarsfield, George Francis	Sault Ste. Marie.	Urquhart, Elias	Gravenhurst.
Standish, William H	Lakofold (Per	Urquhart, Andrew	Barrie.
Simpson, William A Scollard, Wm	Voung's Point	Vigrass, Percy J	
Scollard, wm	Trout Creek	Vigrass, Fercy J	Warren
Shanacy, Wm. J		Vollin, Samuel	Noshonsing.
Seely, George	Arnprior.	Vannier, Nelson Joseph	Bobcavgeon.
Stewart, Alex. W	Lanark.	Vincent, James	Fesserton.
Soreny, William	Braeside.	Vincent, Henry T	Port Sidney.
Schneder, Frederick	Cache Bay.	Vincent, James Vincent, Henry T Vanderburg, Norman	Wisawasa.
Smith. James D	Rat Portage.	valois, Armand	Mattawa.
Sullivan, Jas	Aylmer, Que.	Villiers, Claude	Parry Sound.

List of Persons holding Cullers' Licenses.—Concluded.

White, Thomas S. Bracebridge. Watt, R. A. Spanish. Wilkins, Hughes. Blind River. Wallace, T. William Bracebridge. Watson, Wm. Bracebridge. Webb, Geo. W. Parry Sound. Wilcox, Thomas. Parry Sound. Wilcox, Thomas. Parry Sound. Whitelid, C. H. Pine Orchard. Wright, L. B. Sault Ste. Marie. Ward, Joseph W. Ottawa. Wilkinson, W. French River. Wilkins, Hughes. Blind River. Wilkon, Huntsville. Wilson, Frederick Gutlep Warrell, Wm. James Deseronto. Wells, George W. Little Current. Wilkins, George W. Little Current. Wilkins, George W. Webbwood White, John Thomas Parry Sound. Wilkins, George W. Webbwood White, John Thomas Parry Sound. Wallace, John Thomas Parry Sound. Wallace, John Thomas Parry Sound. Wilkins, Hughes. Blind River. Wims, Peter Blessington. Wilson, Edward. Wilson, Thomas Goth Ottawa. Watterworth, J. A. Sault Ste. Ma Warrell, Wm. Milliam Merel. Wilson, Frederick Gutlep Wilson, Edward. Wilson, David. Watterworth, J. A. Sault Ste. Ma Watterworth, J. A. Sault Ste. Ma Wallace, John Thomas Muskoka Fal Wilson, Frederick Gutlep Wilson, Edward. Wilson, Frederick Gutlep Wilson, Edward. Wilson, Frederick Gutlep Wilson, Edward. Wilson, Frederick Gutlep Wilson, Frederick Gutlep Wilson, Frederick Gutlep Wilson, Federick Gutlep Wilson, Frederick Gutlep Warrell, Wm. Watterworth, J. A. Sault Ste. Ma Watterworth, J. A. Sault Ste. Ma Walson, Frederick Gould Walsen, Peter Muskoka Fal Wells, George W. Little Current Wilkins, Hughen Webboord Wells, George W. Little Current Wilkins, Hughen Wells, Horoural Misso		-		
White, A. Thomson. Watt, R. A. Wilkins, Hughes. Wilkins, Hughes. Wallace, T. William White, Joseph W Warson, Wm. Wilcox, Thomas. Wilcox, Thomas. Widdifield, C. H Widdifield, C. H Wirght, L. B. Ward, Joseph W Warrell, Wm. Watter, Phillip Almonte. Whelan, P. J. Whelan, P. J. White Warrell, Wm. Wickware, Phillip Almonte. Wilson, Edward. Whelan, P. J. Whelan, P. J. Whelan, P. J. White Wm. James White Wm. James Wulson, Frederick Gutlep Warrell, Wm. Wickware, Phillip Almonte. Cloyne. Wilson, Edward. Whelan, P. J. White Wm. James Wulson, Frederick Gould Whyte, John Thomas Goth White Wm. James Wells, George W Wilson, Frederick Gould Whyte, John Thomas Goth White Wm. James Wells, George W Wilson, Frederick Gould Warrell, Wm. Wilson, Edward. Whelan, P. J Warrell, Wm. Wilson, Edward. Whelan, P. J Warrell, Wm. Wilson, Edward. Whelan, P. J White Wm. James Wells, George W Wilson, Frederick Gutlep Wilson, Edward. White Wm. James Wells, George W Wilson, Frederick Gould Watrell, Wm. Wilson, Edward. Whelan, P. J Warrell, Wm. Wilson, Edward. Whelan, P. J Warrell, Wm. Wickware, Phillip Almonte. Cloyne. Whelan, P. J Whelan, P. J Warrell, Wm. Wickware, Phillip Almonte. Whelan, P. J Watreworth, J. A Watreworth, J. A Watreworth, J. A Watreworth, J. A Watre Wooth, J. A Watreworth, J. A Watreworth, J. A Watre Wooth, J. A Watreworth, J. A Watre Wooth, J. A Watreworth, J. A Watreworth, J. A Watreworth, J. A Watre Wilson, Edward. White Wm. James Muskoka Fal Warrell, Wm. Wilson, Edward. Whelan, P. J Watreworth, J. A White Wm. James Muskoka Fal Wells, George W Wilson, Frederick Gould Kenora Wallson, Frederick Gould Watre Wilson, Frederick Gould Kenora Wallson, Frederick Gould Kenora Wallson, Frederick Gould Kenora Wallson, Frederick Gould Watrell, Wm. Watre Wilson, Frederick Gould Kenora Wilkins, George N Wallson, Frederick Gould Wallse, John Thomas Goth Wilson, Frederick Gould Wallse, John Thomas Wells, George W Wilson, Frederick Gould Wallse, John Thomas W	Name.	P.O. Address.	Name	P.O. Address.
Watt, R. A. Spanish. Wilkins, Hughes. Blind River. Wallace, T. William Blind River. White, Joseph W Bracebridge. Watson, Wm Huntsville Whebb, Geo. W. Parry Sound. Wilcox, Thomas Parry Sound. Widifield, C. H Pine Orchard. Whitmore, Edgar Rosseau Falls. Wright, L. B. Sault Ste. Marie. Ward, Joseph W Ottawa. Wilkinson, W French River. Waldie, John E. Victoria Harbor Wigg, Thomas G. Theesalon. Wall, Patrick B Cheboygan, Mich Wall, Patrick B Cheboygan, Mich Watt, Wm. Peterborough. White, Thomas Parry Sound. White, John B Kenora. White, John B	White, Thomas S	Bracebridge.		
Wilkins, Hughes. Wallace, T. William White, Joseph W Watson, Wm. Webb, Geo. W Parry Sound. Wilcox, Thomas. Whiteox, Thomas. Whiteox, Thomas. Wilcox, Thomas. Whiteox, Thomas. Whiteox, Thomas. Wilcox, Thomas. Whiteox, Thomas. Wilkinson, Edward. Whyte, John Thomas Goth. Whyte, John Thomas Goth. Waterworth, J. A. White Wm. James. Warrell, George. Wells, George W Wilson, Frederick Gould Wallace, John Thomas. Thessalon. Wilkins, George N Wilson, Frederick Gould Wallace, John Thomas. Thessalon. Wilkins, George N Wilson, Frederick Gould Wallace, John Thomas. Thessalon. Wylie, Byron M Webbwood White, Allan Pembroke. Warner, Franklin H Watts, George Fort Frances Wood, Thos. White, John B Weblan, P. J McDougall. Whyte, John Thomas Goth. Wilson, Frederick Gould Wallace, John Thomas Thessalon. Wilkins, George N Weblan, P. J McDougall. Whyte, John Thomas Goth. Wilson, Frederick Gould Warrell, George Wilson, Frederick Gould Warrell, George Wilson, Frederick Gould Welson, Edward. Whotean, P. J Wilson, Edward. Weblan, P. J Wilson, Edward. Descronto. Welan, P. J Wilson, Edward. Walloun, P. J Wilson, Edward. Walloun, P. J Wilson, Edward. Walloun, P. J Wilson, Frederick Gould Warrell, George Wilson, Frederick Gould Welson, Frederick Gould Kenora. Wilkins, George N Wilson, Frederick Gould Wallace, John Thomas Thessalon. Wilkins, George N Weblowood Wilson, Parry Sound. Wall Ste. Marie Wylie, Byron M Webbwood White, Allan Pembroke. Watts, George Wood, Thos. Parry Sound. White, John B White, John B White, John B White, John B Wells, John B Wells, John B Webbwood White, John B Webbwood Wood, Thos. Fort Fra				
Wallace, T. William White, Joseph W. Watson, Wm. Webb, Geo. W. Wilcox, Thomas. Wheeler, J. A. McL. Whitmore, Edgar Wilfinson, W. Wilkinson, Wilkins, George W. Wilkins, George N. Baysville Warner, Franklin H. Fort Frances Watts, George Wood, Thos. Parry Sound. Watte, Wallam Warner, Franklin H. Fort Frances Wood, Thos. Parry Sound White, William Peterborough White, John B. Kippewa, Qu Whelan, P. J. Watheau, P. J. Wathonto. Wall Sault Ste. Ma Watterworth, J. A. Sault Ste. Ma Wilson, Frederick Gould Kenora Wilkins, George W. Wylie, Byron M. Webbwood White, Allan Webbwood White, Allan Webbwood White, Allan Webbwood White, Bront Frances Wilsins, George W. White, John Thomas Warrell, George Wullson, Frederick Gould Kenora Wilkins, George W. Wilsins, George N. Baysville Watterworth, J. A. Sault Ste. Ma Warrell, George Wullson, Frederick Gould Kenora Warlel, George Wullson, Frederick Gould Kenora Wilkins, George W. Wilsins, George N. Webbwood White, Allan Webbwood White, John Thomas Warrell, George Wullson, Frederick Gould Kenora Wilkins, George W. Webbwood White, Allan Webbwood Warrell, George Wullson, Frederick				
White, Joseph W. Watson, Wm. Webb, Geo. W. Wilcox, Thomas. Wheeler, J. A. Mcf. Widdifield, C. H. Widdifield, C. H. Ward, Joseph W. Wirght, L. B. Wilson, W. Wilkinson, George N. Wilkinson, W. Wilkinson, George N. Wilkinson, W. Wilkinson, George N. Wilkinson, W. Wilkinson, W. Wilkinson, Edward. Whelan, P. J. Watterworth, J. A. Sault Ste. Ma Watterworth, J. A. Sault Ste. Ma Watterworth, J. A. White Wm. James Wallson, Frederick Gould Kenora. Wilkins, George N. Wilkinson, W. Wilkins, George N. Wilkinson, Pembroke. Watte, William Webbwood White, Allan Pembroke. Watte, Wood, Thos. Warrell, George W. Wilkins, George N. Wilkinson, W. Wilkins, George N. White, Allan Pembroke. Warrell, George W. Wilkinson, Frederick Gould Kenora. Wilkins, George N. Wilkinson, W. White, John Thomas Watterworth, J. A. Sault Ste. Ma White Wm. James Muskoka Fall Wilson, Frederick Gould Kenora. Wilkinson, Foorge W. Wilkinson, Frederick Gould Kenora. Wilkinson, Foorge W. Wilkinson, Frederick Gould Kenora. Webbwood White, Allan Webbwood				
Watson, Wm Webb, Geo. W Wilcox, Thomas. Wheeler, J. A. McL. Whitmore, Edgar Wright, L. B. Waldie, John E. Waldie, John E. Waldie, John E. Waldie, John R. Wall, Patrick B. Wall, Patrick B. Wall, Patrick B. White, John Thomas Goth. Watreworth, J. A. Sault Ste. Ma Warrel, George W. Wilson, Frederick Gould Kenora. Wallace, John Thomas Webbwood Wallace, John Thomas Webbwood Wallace, John Thomas Webbwood Wallace, John Thomas White, Allan Webbwood White, Allan Webbwood Warrer, Franklin H. Fort Frances Wood, Thos. Wood, Thos. Wood, Thos. Wood, Thos. Wood, Thos. Wood, Thos. Woods, A. L. Kenora White, John B. Kippewa, Qu White, John B. Kippewa, Qu White, John B. Kippewa, Qu White, John B. Woods, A. L. White, John B. Kippewa, Qu White, John B. Weblan, P. J. McDougall. Whyte, John Thomas Goth Muskoka Fal Watrell, George W. Wilson, Frederick Gould Kenora Wylie, Byron M. Webbwood Pembroke Wood, Thos. Wood, Thos. Wood, Thos. Woods, A. L. Kenora White, John B. Kippewa, Qu White, John B. Kippewa, Qu White, John B. Weston, Cecil. Dorset.				
Webb, Geo. W. Parry Sound. Wilcox, Thomas Parry Sound. Wheeler, J. A. McL. Widdifield, C. H. Pine Orchard. Whitmore, Edgar Rosseau Falls. Wright, L. B. Sault Ste. Marie. Ward, Joseph W. Ottawa. Wilkinson, W. French River. Waldie, John E. Victoria Harbor. Wall, Patrick B. Cheboygan, Mich Wells, John R. Little Current. White, George W. Little Current. White, Halan Pembroke. Wallace, John Thomas Thessalon. Wilkins, George N. Baysville. Wylie, Byron M. Webbwood Warner, Franklin H. Fort Frances. Wood, Thos. Wood, Thos. Parry Sound. Wood, William D. Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wilson, David Kearney. Weston, Cecil. Dorset.			Wholen P I	MaDangall
Wilcox, Thomas. Wheeler, J. A. McL. Widdifield, C. H. Widdifield, C. H. Wright, L. B. Ward, Joseph W. Wilkinson, W. Wilkinson, W. Wilkinson, W. Wilkinson, Cheboygan, Mich Wall, Patrick B. Wells, John E. Wilt, Yohn E. White Wm. James Muskoka Fal Warrell, George . Wilson, Frederick Gould Kenora. Wilkins, George W. Wilkins, George N. Wilkins, George N. Wylie, Byron M. Wyebbwood White, Allan Pembroke. Warner, Franklin H. Fort Frances White, Thomas . Wood, William D. Sault Ste. Marie. Waterworth, J. A. Sault Ste. Ma White Wm. James . Warrell, George . Wilson, Frederick Gould Kenora. Wilkins, George N. Wyebbwood White, Allan Pembroke. Warner, Franklin H. Fort Frances Wood, Thos. Wood, Thos. White, John B. Kippewa, Qu White, John B. Kippewa, Qu Whelan, Peter M. Renfrew. Wilson, David Kearney. Weston, Cecil. Dorset.			Whyte John Thomas Goth	Ottowa
Wheeler, J. A. McL. Widdifield, C. H. Widdifield, C. H. Whitmore, Edgar Wright, L. B. Sault Ste. Marie Ward, Joseph W. Wilkinson, W. Wilkinson, W. Wilkinson, W. Wilkinson, W. Wilkinson, Cheboygan, Mich Wall, Patrick B. Wells, John B. Wilkinson, Cheboygan, Mich Wells, John R. Wilkinson, Cheboygan, Mich Wilkinson, George Wilkinson, George Wilkins, George N. Wylie, Byron M. Wylie, Byron M. Wylie, Byron M. Warner, Franklin H. Fort Frances Wood, Thos. Warner, Franklin H. Fort Frances Wood, Thos. Warner, Franklin H. Fort Frances Wood, Thos. Wood, Thos. Parry Sound. White, William Peterborough White, John B. Kippewa, Qu White, John B. Kippewa, Qu Whelan, Peter M. Renfrew. Wilson, David Kearney. Weston, Cecil. Dorset.				
Widdifield, C. H. Pine Orchard. Whitmore, Edgar Rosseau Falls. Wright, L. B. Sault Ste. Marie. Ward, Joseph W. Ottawa. Wilkinson, W. French River. Waldie, John E. Victoria Harbor. Wall, Patrick B. Cheboygan, Mich Walls, John R. Little Current. Whiteside, John March Huntsville. Whiteside, John Peterborough. Wilson, George. Lindsay. White, Thomas. Parry Sound. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wilson, George. Powassan. Walls, George W. Little Current. Wilson, Frederick Gould Kenora. Wallace, John Thomas Thessalon. Wylie, Byron M. Webbwood. White, Allan Pembroke. Warrel, George W. Little Current. Wilson, Frederick Gould Kenora. Wallace, John Thomas Thessalon. Wylie, Byron M. Webbwood. White, Allan Pembroke. Warrel, George W. Little Current. Wilson, Frederick Gould Kenora. Wallace, John Thomas Thessalon. White, Allan Pembroke. Wartel, George W. Little Current. Wilson, Frederick Gould Kenora. Wolkins, George N. Baysville. Wylie, Byron M. Webbwood. White, Allan Pembroke. Wood, Thos. Parry Sound. White, William Peterborough Woods, A. L. Kenora. White, John B. Kippewa, Qu Whelan, Peter M. Renfrew. Wilson, Frederick Gould Kenora. Wilson, Frederick Gould Kenora. Wilson, Frederick Gould Kenora. Wallace, John Thomas Thessalon. White, Allan Pembroke. Wood, Thos. Parry Sound. White, John B. Kippewa, Qu			White Wm James	Muskoka Falla
Whitmore, Edgar Rosseau Falls. Wright, L. B. Sault Ste. Marie. Ward, Joseph W. Ottawa. Wilkinson, W. French River. Waldie, John E. Victoria Harbor. Wall, Patrick B. Cheboygan, Mich Wells, John R. Little Current. Whiteside, John Huntsville. White, Thomas. Peterborough. Wilson, George. Lindsay. White, Thomas. Parry Sound. Wood, William D. Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wilson, Frederick Gould Kenora. Wallace, John Thomas Thessalon. Wallace, John Thomas Daysville. Wylie, Byron M. Webbwood White, Allan Pembroke. Warner, Franklin H. Fort Frances. Wood, Thos. Parry Sound. Wood, Thos. Parry Sound. White, John B. Kippewa, Quentum White, John B. Kippewa,				
Wright, L. B. Sault Ste. Marie. Wilson, Frederick Gould Kenora. Wilkinson, W. French River. Waldie, John E. Victoria Harbor. Wilkins, George N. Baysville. Wylie, Byron M. Webbwood Pembroke. Wylie, John R. Little Current. Huntsville. Walt, Wm. Peterborough. Wilson, George Lindsay. White, Thomas Parry Sound. Wood, William D. Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wright, Percy. Fort Frances.		Rosson Falls	Walls George W	Little Current
Ward, Joseph W. Ottawa. Wilkinson, W. French River. Waldie, John E. Victoria Harbor. Wilg, Thomas G. Thessalon. Will, Patrick B. Cheboygan, Mich Wells, John R. Little Current. Whiteside, John Huntsville. Watt, Wm. Peterborough. Wilson, George Lindsay. White, Thomas Parry Sound. Wood, William D Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wright, Percy. Fort Frances. Wilkins, George N. Baysville. Wylie, Byron M. Webbwood. Warner, Franklin H. Fort Frances. Wood, Thos. Parry Sound. White, William Peterborough. White, William Peterborough. White, John B. Kippewa, Qu. White, John B. Kippewa, Qu. White, John B. Kearney. Weston, Cecil. Dorset.			Wilson Frederick Gould	Kanara
Wilkinson, W. French River. Waldie, John E. Victoria Harbor. Wigg, Thomas G. Thessalon. Wall, Patrick B. Cheboygan, Mich Wells, John R. Little Current. Whiteside, John Huntsville. Watt, Wm. Peterborough. Wilson, George Lindsay White, Thomas Parry Sound. Wood, William D Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wright, Percy Fort Frances.				
Waldie, John E. Victoria Harbor. Wigg, Thomas G. Thessalon. Wall, Patrick B. Cheboygan, Mich Wells, John R. Little Current. Whiteside, John Huntsville. Watt, Wm. Peterborough. Wilson, George. Lindsay. White, Thomas. Parry Sound. Wood, William D. Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wright, Percy. Fort Frances. Wright, Percy. Fort Frances.				
Wigg, Thomas G. Wall, Patrick B. Cheboygan, Mich Wells, John R. Little Current. Whiteside, John. Watts, George Wood, Thos. White, Thomas. White, Thomas. White, Thomas. Watts, George Lindsay. White, Thomas. Parry Sound. Wood, William D. Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wigght, Percy. Fort Frances. Fort Frances. White, Allan. Pembroke. Warter, Allan. Pembroke. Watts, George Watts, George Wood, Thos. Parry Sound. White, John B. Kippewa, Qu Whelan, Peter M. Renfrew. Wilson, David Weston, Cecil Dorset.				
Wall, Patrick B. Cheboygan, Mich Warner, Franklin H. Fort Frances Wells, John R. Little Current. Huntsville. Watts, George Fort Frances Wood, Thos. Parry Sound. White, Thomas. Parry Sound. Wood, William D. Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wright, Percy. Fort Frances.				
Wells, John R. Little Current. Whiteside, John Huntsville. Watt, Wm. Peterborough. Wilson, George Lindsay. White, Thomas Parry Sound. Wood, William D Sault Ste. Marie. Watts, John J Fort Frances. Webster, George F Fort Frances. Wright, Percy Fort Frances.				
Whiteside, John Huntsville. Watt, Wm. Peterborough. Wilson, George Lindsay. White, Thomas. Parry Sound. Wood, William D Sault Ste. Marie. Watts, John J. Fort Frances. Webster, George F Fort Frances. Wright, Percy. Fort Frances.				
Watt, Wm				
Wilson, George. White, Thomas. Parry Sound. Wood, William D. Sault Ste. Marie. Watts, John J. Webster, George F. Wright, Percy. Fort Frances. Wilson, David Weston, Cecil. Kenora. White, John B. Whelan, Peter M. Wilson, David Weston, Cecil. Weston, Cecil. Dorset.	Watt Wm	Peterborough		
White, Thomas				
Wood, William D. Sault Ste. Marie. Whelan, Peter M. Renfrew. Watts, John J. Fort Frances. Webster, George F. Fort Frances. Wright, Percy. Fort Frances.			White John B	Kinnewa Que.
Watts, John J Fort Frances. Webster, George F Fort Frances. Wright, Percy Fort Frances.			Whelan Peter M	Renfrew.
Webster, George F Fort Frances. Wright, Percy Fort Frances.			Wilson David	Kearney.
Wright, Percy Fort Frances.				
Tright, Lordy Lord Little Cold Little Cold			Trestan, Comments	2012011
Watts, William B Fort Frances. Younge, Harvey D Fort Frances	Watts William B	Fort Frances.	Younge, Harvey D	Fort Frances.
Watson, Wm			Young, R. H	Fort Frances.
Wagner, Fred Kenora. Yuill, John Albert Braeside.			Yuill, John Albert	Braeside.
Wainwright, Edward C Huntsville. Young, Wm Severn Bridg			Young. Wm	Severn Bridge.
Wilson, Wm. James Deseronto. Young, A. J Cache Bay.			Young, A. J	Cache Bay.
Weston, Frank R. Midland. Young, Samuel Coldwater.				
White, James B Manitowaning. Young, Patrick P Young's Point			Young, Patrick P	Young's Point.
Warren, Robt. M Cache Bay. Young, Francis G Young's Poin			Young, Francis G	Young's Point.
Wilson, Geo. A Balsam Hill. Yuill, Thomas Arnprior.			Yuill. Thomas	Arnprior.
Welch, HaroldMilberta. Yuill, A. DBraeside.				
Wilson, James A., Jr Webbwood. Young, C, T Harvey.			Young, C, T	Harvey.
Woods, John RAntrim. Yuill, John AlexArnprior.	Woods, John R	Antrim.		
Wardell, Ernest C. S Victoria Harbor. Yuill, Archibald Bracebridge.	Wardell, Ernest C. S	Victoria Harbor.	Yuill. Archibald	Bracebridge.
Woods, Joseph F Roach's Point. Yuill, Wm Braeside.	Woods, Joseph F	Roach's Point.	Yuill, Wm	Braeside.
Whaley, Thomas	Whaley, Thomas	Huntsville.	Total, 1,311.	

AUBREY WHITE. Deputy Minister.

Appendix No. 46.

THE FOREST RESOURCES OF ONTARIO.*

BY MR. AUBREY WHITE, DEPUTY MINISTER OF LANDS AND FORESTS.

Mr. President, Your Excellency, Your Honour, Ladies and Gentlemen:

At the request of Mr. Southworth I promised to read a paper at this meeting of the Forestry Association. I have chosen as my subject the forest resources of Ontario, and I hope to give you some information that may

prove interesting and instructive.

I thought in the first instance that perhaps an estimate of the timber still growing on public lands, its whereabouts and its value would sufficiently cover the ground but on thinking over what would be instructive to you, I thought I ought to be a little historical and give you some idea of how we have disposed of our timber, why we sold it, what we have received for it, how much still stands on licensed lands, and last but by no means least, on that branch of the subject, how we are endeavouring to protect and conserve it; then, dealing with the other branch of the subject, to give you some idea of how much timber is on the undisposed lands in Ontario, where it is situated, and what efforts we are making to protect it.

In the first place, let me say what I am sure will be new to you, that when Confederation took place, we found that 12,000 miles of Ontario's best pine timber, the easiest of access, had already been placed under license. 10,000 miles of this territory was disposed of at fifty cents a mile with no bonus, and 2,000 miles of it at fifty cents per mile with very small bonuses, the whole 2,000 bringing about \$100,000. The timber so disposed of was along the Ottawa River to the head of Lake Temiskaming, along and tributary to the Mississippi, the Bonnechere, the Madawaska, the Petawawa, the Mattawa and the Amable du Fond, all these streams being tributaries of the Ottawa River. In the centre of the Province the timber on the Trent and its tributaries had been disposed of. In the West the timber on the Nottawasaga, the Severn, the Muskoss, the Moon, the Seguin and the Magnetawan River flowing into Georgian Bay had been placed under license. The timber on this immense area was subject only to Crown dues at fifty cents per thousand, payable as the timber was cut.

Almost immediately after Confederation the Government of the Province of Ontario had to consider ways and means, and one of the first things it did was to pass regulations increasing the ground rent from fifty cents to \$2 a mile, and the Crown dues upon timber from fifty cents per thousand to seventy-five cents per thousand. It also passed new Crown Timber Regulations, which provided that all timber limits should for the future be sold by

public auction.

The Legislature in the year 1868 passed what is known as the Free Grants and Homesteads Act, which provided for the giving away as free grants to actual settlers of practically all the immense territory lying between the Ottawa River and the Georgian Bay. This region was known to contain large quantities of pine timber, and it was evident that there would be enormous expenditure required to open it up with roads, erect public buildings, and provide for the Administration of Justice. The Government, therefore, reserved from free grant locations all pine timber until the patent issued.

^{*} Paper read at Tenth Annual Convention of the Canadian Forestry Association.

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except that a settler might take what he required for building, fencing, etc., and remove what was in the way of clearing his land. Settlement immediately began to flow into Muskoka, and it was necessary to sell the timber out of the settlers' way. Accordingly, what was the first Timber Sale of new territory was held in the year 1871; 487 miles were offered for sale; a condition was imposed that no pine trees below the diameter of 13 inches on the stump should be cut, and for the purpose of that sale the Crown dues were raised to \$1.50 per thousand. Notwithstanding these conditions \$241 per mile bonus was realized. The increased dues, however, were reduced in 1876 to 75 cents, the same as existed elsewhere. This action was taken on account of a depression in the lumber trade then prevailing. The diameter limit was never enforced because it was found that if the licensee left the small trees the settler cut them, or they were destroyed by fire.

In 1872, 5,031 miles of territory on the north shore of Lake Huron was sold as timber berths, and other sales have been held from time to time down

to the present.

Generally speaking the causes leading to the sales were the advance of settlement, the danger of fire, to enable mill-owners to obtain timber supplies, the necessities of revenue, etc. All the sales were held by public auction after due advertisement, and it is fair to assume, therefore, that the value of the timber at the time it was sold was obtained.

The sale of 1872 covered an enormous area, almost one half what has been sold since Confederation. It was evidently in advance of the necessities of the time, as an enormous quantity of pine timber is still standing on the territory then sold, after 36 years' cutting. The timber on this territory has changed hands many times, always at largely increased values. The dues and ground rent remained the same until the year 1887, when the Government determined to increase them so as to share in the increment of value that had taken place. The ground rent was advanced from \$2 to \$3 per mile, and the dues from 75 cents to \$1 per thousand. There was a large sale in 1887.

In 1890 we had a sale in the Rainy River region, which had just come under the control of the Province. For the purpose of that sale, the dues were \$1.0; pine timber only was sold, and for the first time it was provided

that timber cut on these limits should be sawn in Canada.

In 1892 we had another large sale, in which the dues were fixed at \$1.25 and the ground rent remained the same. The condition in the 1890 sale, that logs must be sawn in Canada, was not attached to the conditions of the 1892 sale. Subsequent to the sale of 1892, there came an agitation in connection with the export of our logs, and in 1897 a regulation was passed, afterwards ratified by Act of the Legislature, that all logs cut on licensed lands of the Crown must be sawn in Canada, and that condition has prevailed ever since. The condition has been extended to spruce and hemlock, so that now all pine trees, spruce trees and all hemlock trees cut on licensed lands of the Crown must be manufactured in the Dominion of Canada. The right of the Province to attach this condition to its licenses was the subject of litigation, but the Province's action was sustained and this leak of our natural resources was stopped, and great development in our Northern districts was another result. Since then we have had other sales, in which a time condition for the removal of the timber was inserted, and at the last sale by public auction in 1903 the ground rent was increased from \$3 to \$5 per mile, and the dues to \$2 per thousand B. M. Notwithstanding the time limit, the increased dues and ground rent, the average bonus at this sale was considerably over \$4,000 a mile. Since 1904 we have sold some small areas and

applied the condition that the bid must be by the thousand feet, so that we shall receive pay for all the timber that is upon the territory, and the purchaser will only pay for what he gets. The ground rent has been continued at \$5 per mile, and the dues at \$2 per thousand. Upon one berth which was sold in this way the highest bid was \$10.52 per thousand feet bonus, in addition to \$2 per thousand dues and \$5 per mile ground rent. Under these new regulations the Department measures the timber so as to make sure that we shall get the full return.

I have sketched for you the principles that have guided us in our timber sales, and the changes in the regulations that have been made. Now at the end of 417 years, we find that we have sold in that period about 12,000 miles or the same extent of territory that was under license when we took over the management of the timber. For that timber we have received in bonus, ground rent and timber dues about forty million and a quarter of dollars, nearly a million dollars a year, and in the same period we have received for lands and mines over nine million of dollars, so that our total revenue from lands, timber and mines in forty-one and a half years has been fifty million and a quarter of dollars. To this extent the people have been relieved of taxation by the sale of the natural resources of the Province. Now in that period of forty-one and a half years we have cut and disposed of twenty four billions of pine, or an average of five hundred and seventy-eight millions per annum. We hear a great deal about the rapid cutting away of our timber but there has been no marked increase in quantity in the past ten or eleven years. In 1896 to 1907 inclusive the average cut was only six hundred and seventy-three millions per annum, and for the last two years the cut has been seven hundred and ten millions per annum or an increase of thirtyseven millions over the average of the last eleven years, and this is largely attributable to railway construction in the West, and I may say that a very large percentage of it consisted of jackpine.

I have taken considerable pains to ascertain what we still have on licensed territory. I have had inquiries made from the quarters best able to furnish accurate information, and then have got the opinions of our own men, who are familiar with the region, and as a result of that inquiry we estimate that there is about seven billions of feet B.M. of red and white pine standing on our licensed territory, besides jack pine, hemlock and spruce, of which there are also large quantities. Hemlock has been called the "skim milk" of the forest. Well, when we cannot get cream or fresh milk we are glad to get skimmed milk, and it may be said of our hemlock that it is coming more and more into use for purposes for which pine is too expensive. Of the jack pine it may be said that it is rapidly increasing in value as its adaptability is admitted for railway purposes, especially ties, Millions of ties are now got out consisting principally of jack pine timber.

Spruce will soon be as valuable as pine.

The preservation of this timber from destruction by fire is a matter of hourly concern, I may say, to the Minister of the Crown responsible for the management of our timber. Now it will be asked, What have you done to protect this great heritage from destruction? Well, I may say that ever since the year 1885 we have had a staff of fire rangers each season on licensed territory. We say to the licensees, who are men of all schools of political thought: How many men will you require to protect your limit from fire during the coming season? They give us the number and they select the men who shall do the ranging. It may be fairly assumed that they choose men who are familiar with the territory, and who are capable of doing the work. We give them instructions and furnish them with literature to hand

to everyone with whom they come in contact, in which the law and the regulations are set out. We caution them not to be overbearing or to irritate the persons they meet, but to endeavour to enlist their sympathy by every possible means in the work of protecting the forests. We oblige the railways running through the back country to pay for the services of fire rangers placed along their roads for the purpose of preventing the forest from being destroyed. We select these men and we place them at short intervals along the roads so that they keep in touch with each other, and put out fire wherever they discover it. On some railways we furnish them with velocipedes so that they can follow the train from one section to another and so on; thus if sparks are thrown or coals dropped by the locomotive and a fire occurs, it is put out before it has time to assume any proportions. We have divided the licensed territory into divisions, and we have put a supervising fire ranger over each division, so that he may visit the rangers, and see that they are on duty and performing the work for which they are paid. The licensee also has a supervision of them and gets reports from them from time to time. We pay half the wages and expenses of rangers upon licensed territory and the licensee pays the other half. This service has inculcated a respect for authority, and a desire to aid and assist in the prevention and extinguishing of forest fires. We issue circulars periodically, asking the licensees the effect of the service, the quantity of timber damaged, and inviting suggestions which will improve the service. The quantity of timber destroyed this year is small and none of it will go to waste. Under instructions the fire ranger reports immediately the occurrence of a fire, its locality and the quantity of timber damaged, and so the licensee is able to lay his plans to cut the timber before it goes to waste. The expressions of opinion from time to time have been commendatory of the service, and the only improvement that has been suggested is that we should increase the number of fire rangers. As an illustration,—last year we had on licensed lands 329 rangers, and our share of the wages and expenses was \$46,600, the licensees paying an equal amount. On railways we had 147 rangers, costing for wages and expenses \$53,235. There has, therefore, been an expenditure during the last year upon fire ranging on railways and licensed lands of \$146,478, apart altogether from what is spent on forest reserves, and unlicensed territory.

Our greatest trouble on licensed territory is in cases where townships are open for settlement, and at the same time under license. The interests of the licensees and the settlers come in collision, and it is a most difficult thing to hold the balances between them. Recently my Minister has adopted the system of inspecting lands applied for before a location or sale is made. This inspection is made by an officer called a Homestead Inspector, and he notifies the timber licensee and the applicant for the land when he will make his inspection, and upon the result of his inspection our action is based. Lots that have quantities of valuable pine timber upon them or that have not fifty per cent. of land suitable for cultivation, we do not as a rule locate, and so we are decreasing the taking up of lands for the purpose of despoiling them of their timber. In the case of townships that are not open, we now inspect them before putting them on the market, and if they are rough and not suited for settlement or valuable for their minerals, we do not open them. We do not always satisfy the diverse interests; sometimes the lumberman is dissatisfied and sometimes the settler, but at any rate our action is a common sense method to elicit the truth; our own officer has no axe to grind and the presence of the settler and lumberman enables them to put their views On the whole I think it may be said we have been careful in our management of the timber, only selling as necessity compelled us and we

have obtained a fair value of the timber sold, and endeavoured by every means possible to prevent it from destruction by fire. This closes what I have to

say about licensed territory.

We now come to the question of what timber there is on unlicensed territory. For convenience of thought we will draw a line, say from the Town of Mattawa up the river of that name, thence across Lake Nipissing and down the French River to Georgian Bay, and say that the timber territory we are now going to speak about lies north of that line. Then we will divide that great region into three areas about which we will speak separately. First,—all territory east of Port Arthur and south of the waters flowing into Hudson Bay. Second,—all territory east of Port Arthur lying north of the height of land and on the Hudson Bay slope. Third,—all territory west of Port Arthur in the Thunder Bay and Rainy River Districts.

Our policy in recent years has been to keep from settlement areas on which we know there are considerable quantities of pine timber or spruce, and which are not deemed to be suitable for farming purposes. Therefore, in the first of the above divisions, in which is the bulk of our white and red pine, we have set aside the following forest reserves: Temagami, area 5,900 square miles; Mississaga, area 3,000 square miles; Nipigon, area 7,300 square miles, and Thunder Cape, 80 square miles, a total of 16,280 square miles, or an acreage of 10,419,000. On each of these reserves, except the Thunder Cape, we have a chief ranger with a staff of fire rangers under him, who during the heat of summer patrol and move about continuously through the reserves, keeping an eye on all persons passing or having business there, handing them pamphlet copies of the law with respect to forest fires and inculcating a spirit of care, and when necessary bringing offenders to justice. The force is large in the summer months, but is reduced in the winter, when the prevention of trespass is the only service called for.

The Temagami reserve is a very important one, and it contains a large quantity of pine timber, variously estimated at from three to four billions of feet B.M. A large percentage of this timber is of first class quality, and from its situation it will bring a large stumpage price per thousand feet. The timber will go partly down the Ottawa waters and partly down the Sturgeon to the Georgian Bay. I think we are safe in assuming that on this reserve there is about three and a half billions of white and red pine. We are surveying it into blocks, and estimating it from year to year, and shall know with some degree of closeness what the quantity of timber I need say no more to impress upon you the wisdom of creating it a forest reserve, and of guarding it carefully. In this reserve we had last year a staff of seventy rangers at a cost of about \$30,000. serious fires and very little timber was damaged. This reserve is the subject of a good deal of anxiety at the present time. We may be said to have an embarrassment of riches in it. There is the pine timber growing on the surface, and below there is the silver mine. How the silver is to be taken out and the timber protected is one of a sort of questions that we have to deal with, and which are calculated to turn a Minister's hair grey. But one thing is certain, we shall have to increase our staff of rangers in this reserve.

North of the Temagami reserve extending through to Abittibi, north and west of the Frederickhouse River, we have found some blocks of pine timber, not any large areas, but sufficient to warrant the opinion that we shall find in that region some 250,000,000 of feet. Then south of the Temagami reserve are a number of townships still in the Crown, containing a large quantity of first class white pine timber. This timber will go down the Sturgeon River and its tributaries to Georgian Bay, or it can be manu-

factured on Lake Nipissing and the lumber shipped by rail. regard to the quality of this timber and its accessibility, it has as high a stumpage value, perhaps even higher, than the Temagami timber. year we have had a staff of fire rangers on duty on these townships, and so far we have been successful in keeping out forest fires. There is no settlement threatening the timber, and we will not allow any at present. In this area the berths are surveyed, and we have estimators each year, and we shall soon have an accurate idea what the actual quantity there is. At present it is estimated at two billions of feet B.M. In territory north and west of Temagami reserve, extending westerly towards Port Arthur, and covering Lake Nipigon and tributary waters, our explorers have come across blocks of pine here and there, some of it north of the height of land, and some of it south. I think we may fairly put the timber in that region at say a billion and three-quarters. There is no settlement as the region is far away from railway communication. We have not much information about this region beyond the reports of surveyors and our explorers, but we think we shall be within the mark in placing the quantity of pine that will be found there at a billion and three-quarters of feet B.M.

In this division is situated the Nipigon forest reserve, in which there is a considerable body of pine, notably up the Gull River, but it was to protect the spruce and pulpwood growing in that great reserve and the game and fish that it was primarily set apart. Here there is a chief with his staff of rangers to protect the territory. Owing to the stream of travel that is going up to the construction of the Transcontinental, considerable vigilance is necessary. There have been some fires during the past year, but none that have done any great damage. We had 22 rangers in this reserve last

year at a cost of some eight or nine thousand dollars.

Thunder Cape reserve is only 80 miles in extent and it was set apart to protect the timber on the promontory called Thunder Cape and to preserve it from destruction by fire. The Crown timber agent at Port Arthur is

ex-officio fire ranger in this reserve.

Then on the Mississaga River which flows into the Georgian Bay, we have created a forest reserve with an area of 3,000 square miles, or 1,920,000 acres. On this we had last year a staff of 21 men at a cost of \$7,600. A little timber was damaged by fire just at the close of the season, which we are now offering for sale. The fire rangers there are constantly on the move, keeping strict surveillance of the territory and of travellers who pass through it. Everywhere printed copies of The Fire Act are posted up, especially at the ends of portages, and everyone coming in contact with a ranger is given a pamphlet copy. We have also surveyed this reserve into blocks and are carefully estimating the timber, but it will take some time to complete the estimate. The timber in this reserve is so close to Lake Huron and so easily lumbered that it should bring a very high stumpage. The quantity of pine on this territory has been estimated at from three to four billions of feet. no settlement near the reserve, and no active mining within its boundaries, so it is reasonably safe. I am assuming for the purpose of this paper that there is three billions of feet B.M. upon this reserve. Outside of this reserve on territory tributary to streams running into lakes Huron and Superior, and also to the Algoma Central Railway, we have found considerable quantities of pine on separate areas. In this territory we have had fire rangers each year, and as the Algoma Central Land Grant is situated in it, they too have had fire rangers. From the estimate made by them, and from our own reports we are of opinion that there is at least seven hundred and fifty millions of feet B.M. of red and white pine there. This timber is also valuable on account of its accessibility.

Now in the territory west of Port Arthur, that is in the Thunder Bay and Rainy River Districts, we have a very large body of pine timber, much greater than we believed to be the case some years ago. We have kept a staff of fourteen rangers on this territory last season, adjacent to Rainy River, Quitico River and Hunter's Island, and so far no serious fires have occurred. A few years ago we had various opinions as to the quantity of pine in this region. We are getting a better knowledge of it, and from the receipt of information from those who are well informed, we have reason to believe that the quantity, as I said, greatly exceeds all former estimates. One of our most expert men, who has travelled over it frequently and knows the country, some years ago expressed the opinion that there was a billion and a quarter of feet B.M. of pine in that region. He has now had the opportunity of seeing what the territory we have sold there cuts out, and is better able to form an opinion as to what will be produced. He is now of opinion that south of the C.P.R. in the territory from Port Arthur to the western boundary we have probably two billions of feet B.M. of pine, and in the territory north of the C.P.R. in the same district, about three hundred millions of feet B.M. This timber, owing to its proximity to the prairie country, and to the immense railway construction that has taken place, has also a very high stumpage value. I may say that much higher estimates as to quantity have been placed upon this territory than I am taking, but I am

taking for my figures what I regard to be the best authority.

I now come to the great region lying north of the height of land on waters flowing towards Hudson Bay. Here in the not distant future will, in my opinion, be found our greatest timber asset. This northern slope is covered with a great growth of spruce timber, becoming smaller in diameter, of course, the further you go north, but all the timber there will come into use if we can preserve it from destruction. For my present purpose I will take only the best spruce area on that slope, commencing at the eastern boundary of the province and extending along the route of the Transcontinental, 400 miles, with an average width of 100 miles to the south and 50 miles to the north of the line. On this territory there is estimated to be 250 millions of cords of pulpwood. The best quality and size is found on the territory between the Ogoke and Kenogami Rivers, and extending from one stream to the other. These pulpwood areas cover parts of the Districts of Nipissing, Sudbury, Algoma and Thunder Bay. West of Port Arthur, on waters flowing north, there is estimated to be 50 millions of cords, so that here in this northern region we have an estimated quantity of 300 millions of cords of pulpwood timber, which will in a short time have a considerable stumpage value. suppose I am quite within the mark in putting its value now at seventy-five cents a cord, for a considerable percentage of the spruce and jackpine, probably 15 to 20 per cent., will make merchantable lumber. It may be said that this territory is not immediately available. That is so, but within the next few years the Transcontinental Railway will be constructed through it, and in my opinion that railway will be taxed to carry the enormous quantities of pulp, rather, may I hope, paper, that will be produced there. Consider the fact that there are seven or eight large rivers all flowing north towards the railway line, down which will pour enormous quantities of saw logs and pulpwood to feed the mills that will certainly be erected at points where these rivers cross the railway. I apprehend that in the not distant future, the Transcontinental will not be the only railway in that region, and one's imagination is not equal to picturing the possibilities there. 300 mil-

Hons of cords of pulpwood would mean about 150 billions of feet B.M. How much of this would make merchantable lumber it is impossible at the present moment accurately to state, but the quantity will be much larger than some of our theoretical friends are willing to admit. Much of this timber is situated on what is called the "Clay Belt," through which the railway will run, and there will be, no doubt, a large influx of settlers in that country as soon as it is opened up. Then our responsibility will be increased. For the present the only danger there, apart from the casual wanderer, will be the construction of the Transcontinental. Next summer we shall be confronted with a tremendous problem; probably the construction of the Transcontinental Railway will be under way all through that region, and if great precautions are not taken, it may be a line of fire all through that valuable timber. In addition to the line of construction, there will be supply roads to take in materials, foods, etc., and these will be additional sources of danger. Just consider,—for a distance of over 600 miles, through a well timbered region, there will be scattered all along the line of railway construction thousands of men using fire for many purposes, such as cooking, smoking, smudges for flies, etc., having no interest in the protection of this timber, and consequently recklessly careless. It goes without saying that the Minister of Lands, Forests and Mines is alive to the situation and that he will do his utmost to protect and preserve the timber by placing fire rangers all along the line, so that everybody may know what law is and that those who are careless may be brought to justice. Notwithstanding all this, unless we have, as we have the right to expect, the active co-operation of the Transcontinental Railway Commission and every one of its officers and employees, such as engineers, contractors, foremen, etc., we shall not, I fear, be able to protect the timber,—but that nothing that can be done will be left undone, goes without saying.

Now let me sum up the situation for you:

The total area of the Province of Ontario, exclusive of the Great Lakes is estimated to be one hundred and forty millions of acres. Of this there is surveyed forty-six millions of acres, leaving an area unsurveyed of ninety-four millions of acres. There have been alienated by sales, location, etc., twenty-four millions of acres, leaving still in the Crown one hundred and sixteen millions of acres.

	Miles.
Licensed before Confederation	12,000
Licensed since Confederation (about)	12,000
	24,000
There is still subject to license nearly 20,000 miles.	
Total receipts from timber since 1867 to the end of '08\$41	,250,000
Total receipts from Lands and Mines from 1867 to the end of '08 9,	,000,000
Total\$50	250 000
Pine timber cut since 1867 to end of 1908	,000,000
	annum.
Average cut from 1867 to 1908	000,000
	,000,000
	,000,000
Estimated quantity on licensed lands, still standing	000,000
11 L.M.	

Timber still standing on unlicensed lands:-Red and	white pine,
13,500,000,000 ft.; pulpwood on unlicensed territory, 300,000	
about 15% of which, or twenty-two and a half billions, will proba	ably be suit-
able for saw log timber.	
Value of timber on licensed lands, 7,000,000,000 ft., at an aver-	1
age of \$1.50 per thousand	\$10,000,000
13,500,000,000 ft. of pine on unlicensed territory at an average	
of \$10	135,000,000
Spruce logs, pulpwood, tie timber, etc.	225,000,000
	370 000 000

FIRE RANGING LAST YEAR.

•			
•	Men.	Cost	
Number of men on licensed territory	376	\$ 46,621	45
Rangers on railways		53,235	71
Rangers on Forest Reserves	111	45,805	18
On Crown Lands	58	17,398	50
Proportion paid by licensees	•••	46,621	45
Total expended for forest protection			
In closing, I would say that I do not think we can be	accuse	ed of negle	ct-
ing our duty in protecting the general forests of the north	1.		

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For Ten Months Ending 31st October

1909

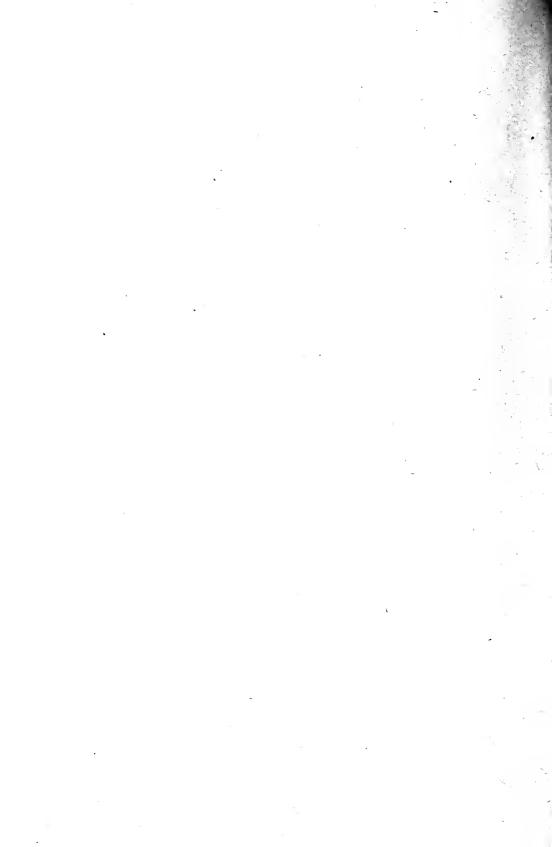
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REPORT OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Ten Months Ending 31st October, 1909.

To His Honour The Honourable J. M. Gibson, Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by law, I submit for the information of your Honour and the Legislative Assembly a report of the management of the Crown Lands of the Province for the ten months ending 31st October, 1909.

CLERGY LANDS.

The area sold during the ten months was three acres for \$5. The amount collected on account of sales of clergy lands was \$903.70. (See Appendix No. 3, page 6.)

COMMON SCHOOL LANDS.

The area of these lands sold during the ten months was 51 acres for \$144. The collection on account of these and former sales was \$6,088.60. (See Appendix No, 3, page 6.)

GRAMMAR SCHOOL LANDS.

The area of these lands sold during the ten months was 100 acres for \$50. The collection on account of these and former sales was \$807.90. (See Appendix No, 3, page 6.)

UNIVERSITY LANDS.

The area of these lands sold during the ten months was 3,740 for \$1,869.57. The collection on account of these and former sales was \$908.30. (See Appendix No, 3, page 6.)

CROWN LANDS.

There was sold for agricultural purposes during the ten months, 78,658 acres for \$128,154.28. There was collected on account of these and former sales \$118,995.12. There was sold for mining purposes 10,708 acres for \$363,635.78. There was collected on account of these sales \$235,098.04. There was leased for mining purposes 3,296 acres for \$3,295.64. There was collected on account of mining leases \$19,016.74. There was 8,265 acres leased for other than mining

purposes and collected on account of Crown leases \$6,911.12. The total area of lands of the Crown disposed of during the ten months was 104,821 acres, and the total collection on account of lands sold and leased was \$388,729.52.

The region lying north of Lake Temiskaming has continued to attract the largest number of settlers. The land is known to be good. It has been demonstrated beyond question that grains and roots of all varieties can be successfully grown there. The country is being opened up by the Temiskaming and Northern Ontario Railway, and colonization roads are being built in various directions. Labour has been in demand and good wages paid. The mining industry and the construction of the Transcontinental Railway have employed a large number of men, and there is a good market for all that can be grown. The actual settler who is residing on his lot with a small clearing of two acres has the privilege of selling any timber other than pine growing upon his land. Spruce is plentiful in the Temiskaming region and the bona fide settler can, therefore, earn considerable money taking out pulpwood which commands a ready sale. This enables him to remain on his lot during the winter months instead of having to go away in search of employment.

A number of townships were opened for settlement along the line of the Transcontinental Railway; a considerable area of land has been taken up therein and many settlers have gone into occupation. Other intending settlers are waiting the completion of the Transcontinental before moving their families in permanently. It is only a short time since the town site of Cochrane was put upon the market in what was a veritable wilderness. Now it is a flourishing incorporated town with a Mayor and Council and a population of about 800 souls. When the railway is constructed east and west, Cochrane, as the divisional point for both railways and an important junction, will no doubt become a large and flourishing town. The additional surveys made recently afford additional evidence that the statements concerning the agricultural possibilities of that great territory were if anything too moderate. The recent gold discoveries at Porcupine have given an added interest to that region, and as soon as the spring opens there will be a great influx of population.

In the Sudbury region, also in the vicinity of Port Arthur and Fort Frances, considerable settlement has taken place.

The Department has endeavoured to make certain that only land capable of cultivation is being taken up and that settlers prosecute their improvements in compliance with the law and regulations. Lands are inspected upon application being made, and if they are not suitable for agriculture they are not sold. Careful and systematic inspection of sold and located lands is made in order to see that parties are in residence and prosecuting their settlement duties in a satisfactory manner. If they fail to do so they are immediately warned to go into actual residence within a certain period and failure to do this entails forfeiture of their claim. By means of these inspections settlers are kept alive to their duties, and people taking up land, hoping to strip it of the timber, are baulked in their efforts.

FREE GRANTS.

The best land available in the old free grant districts has been taken up. The Department has considered that a location should not be taken up as a farm unless it has enough land to warrant the expectation that a man can make a living on it by agricultural pursuits, for which purpose at least 50 per cent. of it should be good land. In old townships, too, there is a desire to obtain land just to strip it

of its timber and then abandon it. The close inspections we are now making are having a good effect and people are realizing that they must take up land to farm it, not dispose of the timber and then leave it. In the carrying out of this policy it is inevitable that there should be disappointment and complaint on the part of those who cannot get the timber they want, and sometimes on the part of the licensees when the Department locates lots covered by their licenses which are good for agricultural purposes.

During the year 1909 two new townships were opened for settlement, Morson and Temple, the former in the Rainy River Valley, attached to the Stratton Agency, and the latter in Kenora district, attached to the Dryden Agency. These townships were opened under Section 4, Chapter 8, Edward VII., which provides that the pine and minerals may be included in a free grant location or sale. Settlers in these townships, after having been in occupation for six months with a house 16 x 20 feet, and six acres cleared and under crop, are entitled to dispose of all pine trees free of any charge. Already a number of settlers have availed themselves of the opportunity of locating in these townships.

MILITARY GRANTS.

During the year 1909, only 30 Military Certificates were issued; this brings the total number granted, under 1 Edward VII., Cap. 6, to 13,987.

Location certificates issued this year numbered 250, and 350 new locations were made, bringing the total number of locations up to 7,195.

\$50.00 each were paid for 161 military certificates surrendered to the Crown, making a total of 3,211 disposed of in this way.

There were 434 notices issued to military settlers and assignees of veterans, calling upon them to show that they were in actual occupation and the nature of the duties they have performed.

THE MINING INDUSTRY.

The production of ores and minerals proceeded vigorously during the ten months ending 31st October, 1909, but until the statistics for the calendar year are compiled, an exact comparison cannot be made with previous years.

The silver mines of the Cobalt camp again surpassed all their previous records, and judging from the output during the ten months, the total yield for 1909 will be not less than 25,000,000 ounces, and will possibly exceed that quantity. The chief producing mines continue as before, namely: Nipissing, Crown Reserve, Kerr Lake, O'Brien, Buffalo, Coniagas, Trethewey, Temiskaming, McKinley-Darragh-Savage, etc. The output of silver in Ontario for 1909 will probably be about one-half that of the entire United States during the same period.

The newer silver fields are coming into yield, namely, South Lorrain, Elk Lake and Gowganda; shipments from mines in all three districts will doubtless be made when the winter roads are available.

Towards the close of the ten months' period, reports of the discovery of rich gold ores came from the neighbourhood of Porcupine Lake in the Townships of Tisdale and Whitney, lying north of the height of land between Hudson Bay and the great lakes, and about 30 or 35 miles due west of Matheson Station on the Temiskaming and Northern Ontario Railway. Investigations showed the reports to be correct; a number of quartz veins from one foot to 25 feet and over in width and of considerable length having been located, with fine showings of free

gold in many places. One deposit exhibited a width of 75 feet and much free gold. A rush followed upon the discoveries being made known and there is every likelihood of many claims being staked out during the coming months. Should the veins prove to be of workable value and depth, there are good prospects for the establishment of a permanent gold mining camp, since the bodies of ore are large.

Nickel-copper mining in the Sudbury district has also been active, and the aggregate output of nickel and copper in the form of matte will probably prove to be greater in 1909 than in any previous year. The Province of Ontario now produces from 60 to 70 per cent. of the world's supply of nickel. The producing companies are the same as before, namely, the Canadian Copper Company, Copper Cliff, and the Mond Nickel, Victoria Mines. The Dominion Nickel-Copper Company have undertaken the exploitation of the Whistle mine and other deposits of ore near Blue Lake on the North Nickle Range, and are proposing to construct a branch line of railway from the Canadian Northern through the Township of Norman to the mines.

The total revenue from mining sources for the ten months was \$254,114.78.

COLLECTIONS.

The total collections of the Department from all sources for the ten months ending 31st October was \$2,028,224.48. Of this amount \$235,098.04 was derived from mining lands; \$338,426.66 from royalties; \$885,892.44 from woods and forests; \$49,730.03 from supplementary revenue; \$108,701.00 from mining licenses and \$110,772.95 from recording fees. (See Appendix No. 4, page 7.)

DISBURSEMENTS.

The gross expenditure of the Department for all services during the ten months was \$522,813.23. The principal services were: Agents' salaries and disbursements, \$40,475.76; forest ranging, \$46,656.69; fire ranging, \$132,827.26; forest reserves, \$65,992.22; mines and mining, \$17,197.79; exploration and investigations, \$12,-639.00; mining recorders, \$22,651.77; surveys, \$83,357.33; veterans' commutation, \$8,050.00; provincial mines, \$13,777.72; refunds, \$14,064.53; parks, \$11,847.82; contingencies, \$31,609.19. (See Appendices Nos. 6 and 7, pages 9 to 47.)

WOODS AND FORESTS.

The total revenue from Woods and Forests for ten months was \$885,892.44, consisting of Bonus, \$285,571.41; Timber dues, \$529,422.50; Ground Rent, \$68,528.53; Transfer Fees, \$2,370.00. (See Appendix No. 4, page 7.) The revenue from Timber dues, being for ten months only, ending 31st October, is small as compared with amounts appearing in previous reports. The explanation is that the accounts for the previous season's cutting were not collected, as they do not accrue due until the 1st December following the winter in which the cutting took place. The Bonus consists of deposits made on account of the sale held in the month of September. For a number of years a system of issuing permits to cut timber for railway and other purposes had prevailed. The system was originally established to meet an emergency which had largely passed away, and it appeared reasonable that so far as possible no timber in that region should be disposed of except by public sale. Plenty of notice was given of the intended change and in conformity with such notice no permits were renewed after the 30th April last. It seemed proper

that those who had been operating and were still contracting and had acquired lumbering plants and mills, etc., under a proper system of public sale and license, should be given an opportunity of acquiring timber to enable them to carry on their The Department had been preparing for the proposed change and had the territory formerly under permit and some additional areas damaged by fire, surveved into berths and estimated and put them up for public competition on the 15th day of September last. Many of the berths offered had been previously cut over under permit and, therefore, the sale was largely a cleaning up sale. The timber was sold by the thousand feet with the object of making sure that the Crown would be paid for every foot on the territory, and that the purchaser would only pay for what he got. Under the old system of selling by the mile the estimates were often faulty, and the Province did not get paid for all the timber on the berths. Under the present system strict justice is done both the buyer and seller as to quantity. The purchasers were required to deposit substantial sums as security for the due performance of all the conditions. The sale was very successful in that good prices were obtained, much beyond what was expected in many instances. The damaged timber is now being cut so that the fire loss will not be large.

A serious fire having occurred in the Mississaga Reserve, the damaged timber in that Reserve was also divided into berths and offered for public competition. The bids were to be on the basis of a thousand feet B.M.—that is to say, parties were invited to state how much per thousand feet B.M. they were willing to pay for the timber in addition to \$2 per thousand feet dues and \$5 per mile ground rent. It was also a condition of the sale that all timber should be measured by cullers appointed by the Department whose measurements are to be the basis of payment as the timber is removed, the licensees paying half the expense. The right to cut is limited to a period of ten years, after which the timber remaining is to revert to the Crown.

The lumber trade is in a better condition because there is an increased demand and an advance in prices. What effect the tariff legislation of the United States will have when applied remains to be seen. The output for the season of 1909-10 is estimated to be from sixty to one hundred millions in excess of last year.

FIRE RANGING.

The fire ranging system has been continued on the same lines as described in my last annual report. The history and regulations of this important service were reviewed and explained last year, and it is, therefore, unnecessary to refer to anything except the work of last season. The danger points are, along the lines of nailways under construction, in Forest Reserves where mineral prespecting or development is going on, and on licensed territory where settlers are clearing land. It is a testimony to the good effect of the service on licensed lands that very few fires are reported as having been caused by clearing of land by settlers.

In the Mississaga Forest Reserve as well as in the Temiskaming forest fires occurred. The quantity of timber damaged in the Mississaga would probably be seventy-five million feet. As the fire ran in streaks it was necessary to sell the green timber interspersed through the burnt. Every effort was made to trace the cause of this fire and fix the responsibility, but it was found impossible to do so. Serious fires had occurred on territories south of the Reserve damaging licensed territory, and the fire which injured the Reserve ran up from the licensed lands. There were a few fires in the Temagami Reserve which damaged small quantities of red

and white pine of the Crown and spruce and jack pine, the property of the pulp. concessionaire. The quantity of pine was offered for sale and is being cut this winter. It is expected between two and three million feet will have to be cut. It was impossible to establish the origin of the fire or bring it home to any particular person. There are hundreds of miners and prospectors moving about, and working in this Reserve, using fire for cooking, for warmth, smudges for flies and smoking. We have a large staff of fire rangers on duty in this Reserve under two efficient superintendents and they are believed to give good service. Considering how careless the average man is in the use of fire it is not to be wondered at that we had fires in this immense reserve during last summer, which was the driest and most prolific of forest fires we have had for years. In the Nepigon Reserve we had a few fires, but no large quantity of timber was damaged. In the Quetico Reserve in Rainy River District no fires were reported. In the Eastern Reserve there were no serious fires, nor were there any in the Thunder Cape Reserve. In the case of these Reserves, as on the licensed territory and that in the Crown, the great value of the fire ranging system is the prevention of forest fires by warning everybody to be careful in the use of fire, by rangers moving about and letting people know they are on the spot prepared to enforce the law, and generally inculcating a spirit of care and respect for the law on the part of every one with whom they come in contact. They are able to suppress fires before they attain any large proportion and put out smouldering fire after a rain. After a forest fire attains considerable proportions it is impossible to control it. In Forest Reserves the rangers have to move in cances to some extent, but a good deal of their work is done on land. In selecting the ranging staff every effort is made to ascertain if the applicant for the position is a good canoe man, and if he is he is selected for Reserve work. It sometimes occurs that a ranger is not as good a canoe man as those experts he comes in contact with and criticism arises. It also happens that rangers, like other individuals, are careless, or the victims of accident, and frequently criticism without a knowledge of the circumstances is unfair and unjust. In some cases rangers have lost their tents and blankets by fire. The loss has been made the subject of investigation, and if it appears the loss was the result of carclessness or ignorance the ranger is charged up with the loss whatever it may be. If, on the other hand, it has occurred through an accident that might have happened to any one, nothing is done beyond cautioning the ranger to be careful. The Department obtains a report each season on the capacity of each man, and if any man is careless or is no use he is not again employed.

On the lines of railway where rangers are employed the territory is divided up into ten-mile beats and placed in charge of two rangers. They camp on the centre of the ten-mile beat and every day one goes five miles in one direction and back at night, the other does the same in the other direction. They post up proclamations, interview the foremen of the work and tell them what is required to be done and request them to caution their men to be careful in the use of fire, etc. Passing along the work every day they can soon judge whether proper precautions are observed, and call the foreman's attention to any neglect, and if necessary put the law in motion to punish the offender. Rangers have been put on the T. & N. O. in this way, on the Canadian Pacific and the Canadian Northern where necessary and Port Arthur Junction Railway, and these railway companies have aided the rangers in every way possible, and paid for them at the end of the season. Until quite recently the great pulpwood forest lying on the height of land and extending on both sides has been quite safe from danger, there being no dangerous element there.

Now the region has been pierced by the Transcontinental Railway frem one end to the other, thousands of men being employed, a large proportion of whom are foreigners without any knowledge of our laws or efforts to preserve the forests from destruction, and caring nothing whether it is burnt up so long as they can use fire to suit their object. They have no interest in or care for public property. This makes the whole line of construction a menace to the forests on each side of it. Not only so but tote roads are built which are veritable lines of danger to the forests on each side. The Province is not responsible for this danger, as the railway builds under Dominion legislation, and we cannot enforce our legislation with respect to efficient protection. It was hoped, as the danger was caused by the construction under the Dominion Government, that in common with other railways they would bear a share of the expense of fire protection, but so far no contribution has been made.

The fire ranging on licensed territory as heretofore has been conducted by men selected by the Timber Licensees. The work has been efficiently performed and continues to give satisfaction to the limit holders. The number of Rangers on Forest Reserves was 185 and the cost was \$65,992.22. The number on railways was 187 and the cost was \$66,712.49. The number on licensed lands was 450, costing \$66,-114.71. The railways refund the expense, except the Transcontinental, which contributes nothing. The Licensees pay half the expense of fire ranging on their limits.

Cullers' Examinations.

Cullers' Examinations were held at North Bay, Amprior, Thessalon, Kenora and Fort Frances. Fifty-eight candidates were successful at these examinations and were granted certificates authorizing them to act as cullers.

(For list of cullers see Appendix No. 28, pages 87 to 98.)

CROWN SURVEYS.

The following Crown Surveys have been undertaken this year:—
Instructions for subdivision of two townships were issued, namely:—

District of Nipissing, Township of Blount. District of Kenora, Township of Wabigoon.

Instructions also issued for a number of base and meridian lines and township outlines in the Mississaga Forest Reserve and in the Temagami Forest Reserve.

The base and meridian lines were in the Districts of Sudbury and Algoma and there were 190 miles run.

Survey of outlines of townships in the Temagami Forest Reserve, 457 miles run.

Survey of township outlines in the Mississaga Forest Reserve, 347 miles run. A number of timber berths in the Districts of Thunder Bay, Rainy River and Kenora, Algoma and Nipissing, have also been surveyed during the year.

The town plot of Gowganda has also been laid out, also an addition to the town plot of Smyth, in the District of Nipissing, also preliminary surveys of several proposed town sites.

The survey of Lake Abitibi and Islands therein has been completed.

Several other minor surveys have been performed.

The reports of the surveyors of the base and meridian lines in the Clay Belt in Northern Ontario continue to give favourable impressions on the soil passed over by their lines.

The surveyors' reports so far as received and examined will be found in Appendices 16 to 25 inclusive, pages 60 to 83 inclusive.

MUNICIPAL SURVEYS.

On the petitions of the municipal councils of the town of Niagara, town of Haileybury, township of Winchester and town of Niagara, instructions have been issued to survey the lines of certain streets in the several towns and to survey the concession line and road between the 10th and 11th concessions of the township of Winchester across lots Nos. 12, 13, 14, 15, 16, and the west half of lot No. 17, in the 10th concession thereof.

The following municipal surveys have been confirmed under the provisions of the Revised Statutes of Ontario, 1897, Chapter 181, sections 14 and 15, such surveys being final and conclusive. The original road allowance between the 3rd and 4th concessions of the township of Garafraxa. The boundary road allowance between the township of McKillop and Grey.

Particulars relating to these surveys will be found in Appendices No. 14 and 15, pages 58 and 59.

MINING AND OTHER SURVEYS.

The Mining Act of Ontario requires that applicants to purchase or lease mining lands in unsurveyed territory shall file in the Department, surveyor's plans (in triplicate) of the proposed mining claims with field notes and description by metes and bounds, before any sale or lease can be carried out, and under Ordersin-Council, dated February 26th, 1906, 2nd October, 1907, 7th November, 1907, applicants to purchase islands, or locations for pleasure and summer resorts or for agricultural purposes in unsurveyed territory, are required to file surveyor's plans (in triplicate) of their islands or locations as the case may be, with field notes and descriptions by metes and bounds, together with the necessary affidavits as to there being no adverse claim by occupation or improvement, etc.

Under the above Act, Orders-in-Council and Regulations in the Districts of Parry Sound, Nipissing, Sudbury, Algoma, Thunder Bay, Rainy River and Kenora, an area of 14,298 acres has been sold and patented during the year, for which the sum of \$185,394.22 has been received, and an area of 17,040 6-10 acres has been leased at \$1 per acre for the first year's rental.

F. COCHRANE,

Minister.

DEPARTMENT OF LANDS, FORESTS AND MINES, Toronto, October 31st, 1909.

APPENDICES.

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for 10 months ending October 31st, 1909.

Remarks.	-	Died August 12, 1909.		Resigned April 1, 1909.
Salary per annum.		800 00 850 00 700 00 650 00 675 00 1,700 00		850 00 850 00 850 00 850 00 1,800 00
When appointed.	HOMMED AMMED	1906, July 1		1906, April 21. 1907, March 13. 1909, March 24. 1909, March 24. 1904, Nov. 23. 1909, March 24.
Designation.	Minister Deputy Minister Law Clerk Minister's Secretary Secretary to Department Stenographer do Chief Clerk Clerk Clerk do do	do do do Stenographer do do	Stenographer Clerk Director, of Surveys Surveyor and Draughtsman. Ass't Surveyor & Draughtsmin Draughtsman Clerk do	Draugntsman do do do do do Stenographer Chief Clerk
Name.	Hon. F. Cochrane Aubrey Thite George Kennedy George W. Yates E. S. Williamson Janet Garvie M. M. McCrea J. J. Murphy Walter C. Cain W. R. Ledger Selby Draber	3500	E. I. Whiter E. M. Browne G. B. Kirkpairtok J. F. Whitson W. F. Lewis D. G. Boyd E. M. Jarvis J. B. Proctor H. Treeby	orson bhet leaman kland iday
Branch.		Sales and Free Grants	Military Grants	Surveys and Patents .

	C. E. Burns W. S. Sutherland W. Carrell A. E. Robillard	do do do		1,000 1,000 900 900 900 900 900 900 900 900 900	
	A. E. Koe J. A. G. Crozier Kenneth Miller	do Chief Clerk Clerk	1867, Dec. 1		
	J. B. Cook	do do			
	F. J. Niven F. W. Trivett	op op			
Woods and	R H. Hodgson	do	1904, Nov. 23	950 00 950 00	
Forests	Chester Dies	op	1907, March 13		
	A. J. Lamb	do do	1907, March 13	850 00 750 00	
	G. W. Harris	op	March	_	
	Florence Lennon	Stenographerdo	1907, March 13	575 00	Resigned Angust 5, 1909.
	Amy Thompson	op		550 00	
	ry E. Bilss	ор			
	D. George Ross	Accountant	1861, April 15	2,200 00 1,200 00	
	Z.	do			
Accounts	H. E. Johnston	op op	1907, March 13	1,900 00 900 00	
	5	ф		_	
	Frank Yeigh	Registrar			Decimal Contambor 99 1000
	m. cartwright	Clerk Winiston	1895, Uct. 1	-	resigned September 55, 1303.
	R D Fisher	Secretary	1891, June 19	3,250 00	
		Clerk	, , ,		
	~	op		00 006	
	W. Lemoine	OD	1908, April 8		
Duron of Mines	Anne Moffatt	do do		850 00	
tu ot mines.	D. H. Barr	đc			
	A. G. Scovill	ф			
	Ethel Craig	Stenographer	1906, May 16	625 00	
	Flossle McDougall	0D	-4 P		
	H. Brophy	Messenger	1893, Oct. 1	700 00	

Appendix No. 2.

List of Land Agents and Homestead Inspectors for ten months ending October 31st, 1909.

Remarks.	Retired Aug. 11, 1909.
Salary per annum.	2550 90 2550 9
Date of appointment.	1907, Oct. 1 1906, Nov. 23 1906, Nov. 23 1905, July 28 1905, July 3 1906, July 3 1906, Nov. 15 1908, Nov. 19 1908, June 8 1908, June 8 1908, June 8 1908, July 29 1906, June 8 1908, July 29 1906, July 20 1906, May 7 1906, May 7 1908, July 20 1906, May 7 1908, July 20 1906, July 3 1906, July 3 1907, Sept. 8 1906, Sept. 8 1906, Sept. 8 1906, Sept. 13 1906, May 31 1906, May 12
, District or county.	Part of Victoria Homestead Inspector do Frontenac and Addington Homestead Inspector and Crown Land Agent Part of District of Sudbury do do Algoma Homestead Inspector Part of District of Rainy River do do Nipissing Homestead Inspector Part of District of Nipissing Homestead Inspector Part of District of Parry Sound Lake Temiskaming, District of Nipissing Homestead Inspector Town Plot of Alberta and part of District of Rainy River Town Plot of Alberta and part of District of Homestead Inspector Town Plot of Alberta and part of District of Homestead Inspector Town Plot of Alberta and part of District of Homestead Inspector Town Plot of Alberta and part of District of Homestead Inspector Town Plot of Alberta and part of District of Homestead Inspector An Obstrict of Nipissing do do Sudbury do do Rainy River do do Nipissing do do Nipissing do do Parry Sound do Abenfrew Renfrew Renfrew Benfrew
Post office address.	Minden Fort Frances Kenora Denbigh Bracebridge Massey Thessalon Parry Sound Stratton Station Cochrane New Liskeard Matheson Sault Ste. Marie. Apsley Powassan Maganetawan New Liskeard Chelmsford Tort Frances Murillo Mattawa Emsdale Fort Arthur Blezard Valley Sturgeon Falls Worth Bay Sturgeon Falls Parry Sound Wilno
Name.	Baker, R. H. Barr, James Belyea, C. W. Both, Charles Brown, James B Brown, James B Buchanan, Thomas. Burnes, C. W. Campbell, William. Campbell, William. Child, Frank A Dean, Thomas Eastland, T. G. Grills, H. J. Freeborn, Dr. J. S. Grills, John J. Groulx, R. J. Hughes, Thomas Jenks, James Jenkin, William Keefer, Harold A Lemieux, J. A. MacLennan, J. K. MacLennan, J. K. MacLennan, J. K. MacLennan, J. K. Parsons, W. J. Phillion, James A. Persons, W. J. Phillon, Fred R.

300 000	500 00 Died May 21, 1909. 300 00 Also Mining Recorder. 500 00	300 00 250 00 250 00	760 00 500 00 300 00 Resigned, Feb. 28, 1909.
1906, May 7	1880, June 17 1909, Sept. 21 1869, May 28	1905, July 3 1905, July 14 1905, April 7	1905. May 10 1908, June 30 1901, Nov. 23
Quenneville, Isadore Sturgeon Falls Homestead Inspector			Assistant Homestead Inspector. Part of District of Nipissing. do do Algoma
Sturgeon Falls Sault Ste. Marle.	Powassan Kenora L'Amable	Pembroke Warren Marksville	Englehart Englehart, J
Quenneville, Isadore Rothwell, B. J	Scarlett, J. S. Powassan Spry, W. L. Kenora Taitt, J. R. L'Amable Wilson James	Warren, D. B. Pembroke Wright, E. A. Warren Whybourne, W. E' Marksville	Watson, T. P Englehart Woollings, Joseph Sault Ste. Marie.

(AUBREY WHITE, Deputy Minister Lands and Forests.

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections for 10 months ending October 31st, 1909.

Service.	Acres sold and leased.	Amount of sales and leases.	Collection on sales and leases.
Crown Lands:		\$ c.	\$ ~c.
Agricultural	78,658	128,154 28	118,995 12
Mining	10,708	363,635 78	235,098 04
Clergy Lands	3	5 00	903 70
Common School Lands	51	144 00	6,088 60
Grammar School Lands	100	50 00	- 807 90
University Lands	3,740	1,869 57	908 30
Leases:			
Mining	3,296	3,295 64	19,016 74
Crown	8,265	527 00	6,911 12
	104,821	\$497,681 27	\$388,729 52

D. GEO. ROSS, Accountant. AUBREY WHITE,
Deputy Minister Lands and Forests.

Appendix No. 4.

Statement of Revenue of the Department of Lands, Forests and Mines for 10 months ending October 31st, 1909.

Service.	\$	c	\$	c.	\$	c
LAND COLLECTIONS.	-					
Crown Lands:						
Agricultural	118,995	19				
Mining	235,098					
	200,000		354,093	16		
Clergy Lands	903	70	001,000	10		
Common School Lands	6,088	60				
Grammar School Lands	807					
University Lands	908	30	0.700	-0		
Rent:		_	8,708	90		
Mining Leases	19,016	74				
Crown Leases	6,911					
			25,927	86		
Mining Licenses	108,701	00	ŕ	ĺ		
Recording Fees	110,772	95	010 1=0			
7.11	220 400	CC	219,473	95		
Royalties	338,426 115,411	71				
Provincial Mines	110,411	11	453,838	37		
Supplementary Revenue:		İ	100,000	"		
Acreage Tax	10,719	85				
Profit Tax	28,812	60				
Gas Tax	10,197	58				
-		-	49,730	03	1,111,771	o
Woods and Forests.				_	1,111,771	0
Bonus			285,571	41		
	• • • • • • • • • •		529,422			
Ground Rent			68,528	53		
Transfer Fees	• • • • • • • • •	• • • •	2,370	00	005 000	
Drawingial Aggay Haga	790	en'-		-	885,892	4
Provincial Assay Fees	789 523					
Cullers' Fees	352					
-			1,665	43		
Rondeau Park	288		-,			
Algonquin Park	438					
Forest Reserves	400	35	. 1 107	25		
D			1,127	59	2,792	75
REFUNDS.				İ	2,.02	•
Wood Ranging			1,384	56		
			24,511	41		
Diamond Drill			1,517	42		
	• • • • • • • • •		200			
Quebec Agency			14 50			
Agents' Salaries		•••	30			
Inspection Fees	· • • • • • • • • • • •	• •	10			
Explorations and Investigations			10			
Contingencies			40	00		
		1_		-	27,767	38
					0.000.004	4.4
				- 1	2,028,224	40

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for 10 months ending October 31st, 1909, which are considered as Special Funds.

Service.	\$	c.	\$ 0	c. •
Clergy Lands. Principal		90 80	903	3 70
Common School Lands. Principal	2,020 4,068		6,088	60
Grammar School Lands. Principal	319 488		807	90
University Lands. Principal. Interest.	796 112		908	

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines for 10 months ending October 31st, 1909.

Charles October 915t, 1505.					
Service.	\$	e	\$ c	1	\$ c.
Agents' Salaries.					
Land.		ĺ			
Baker, R. H	291 (66			
Belyea, C. W	187				
Both, Charles	83 8				
Brown, James B	750 (
Byers, R. J.	250 (416 (
Campbell, John G	473 8			1	
Campbell, William	416 (
Child, F. A	395				
Eastland, T. G. Ellis, H. J.	250 (223 (
Freeborn, J. S	416				
Grills, J. J	416 6				
Hollands, C. J	250 (
Jenks, James	416 6 416 6				
Jenkin, William	416 6				
Lemieux, J. A	333 8				
McFayden, Alex	416 6				
MacLennan, J. K	$\frac{416}{416} \frac{6}{6}$	- 1			
Parsons, W. J	416 6				
Powell, F. R.	416 6			İ	
Prince, Adam	416 6				
Pronger, R. H	250 0				
Rothwell, B. J	$\frac{200}{193} = 0$				
Scarlett, James	416 6				
Warren, D. B	250 0				
Whybourne, W E	179 1				
Wilson, James	$125 \ 0 \ 416 \ 6$				
Woollings, Joseph	416 6				
Young, H. N.	$50 \ 0$	00			
		-	11,402 75		
Timber.					
Christie, W. P	1,333 3	3			
Hawkins, S. J	1,166 6				
Henderson, Charles	1,333 3				
Howie, R. J.	1,000 0				
Johnson, S. M	1,3333 $1,1666$				
Margach, William	1,333 3				
Maughan, Joseph	1,166 6				
Oliver, J. A	$\frac{1,250}{1,66}$				
Stevenson, A	1,166 6 1,333 3				
McDougall, James T	1,170 0				
Homestead Inspectors.			14,753 29		
Barr, James	1,000 0		And the second		
Burnes, C. W Chester, Thomas	750 0				
•	1,000 0	U			
Carried forward	2,750 0	0	26,156 04		

Service.	\$ c.	\$ e.	\$ c.
Brought forward	2,750 00	26,156 04	,
AGENTS' SALARIES.—Continued.			
HOMESTEAD INSPECTORS.—Concluded.			
Dean, Thomas. Groulx, R. J. Hughes, Thomas. Quenneville, I. Watson, T. P.	500 00 500 00 500 00 500 00 760 00	- 5,510 00	
AGENTS' DISBURSEMENTS.		0,510 00	
Land.			
Belyea, C. W. Brown, James B. Buchanan, Thomas. Byers, R. J. Campbell, John G. Campbell, William Child, F. A. Jenks, James. Jenkin, William Keefer, H. A. McFayden, Alex MacLennan, J. K. Parsons, W. J. Phillon, J. A. Powell, F. R. Prince, Adam. Pronger, R. H. Rothwell, B. J. Scarlett, James. Spry, William L. Warren, D. B.	87 40 127 80 11 50 9 96 46 25 19 50 10 90 14 02 6 73 30 95 70 74 91 94 13 75 10 99 14 00 30 00 30 00 6 00 6 00 5 04		
Whybourne, W. E	2 00		
Wilson, James	$\begin{array}{ccc} 20 & 94 \\ 21 & 50 \end{array}$	688 95	
Timber.		000 90	
Christie, W. P. Hawkins, S. J. Henderson, Charles Howie, R. G. Johnson, S. M. McDonald, Hector. Margach, William Maughan, Joseph Oliver, J. A. Stevenson, A. McDougall, J. T. Watts, George (Acting Agent) Homestead Inspectors. Barr, James. Burnes, C. W.	311 48 352 38 258 64 352 06 82 05 424 95 975 50 421 96 845 83 454 27 136 19 350 02	_ 4,965 33	
Burnes, C. W Chester, Thomas	490 99 190 45		
-	1,152 69	37,320 32	

11			
Service.	\$ c.	\$ c.	\$ c.
Brought forward	1,152 69	37,320 32	
Homestead Inspectors.—Concluded. Dean, Thomas	344 80 155 95 129 06	- 2,251 55	
misceiuneous.			
Ames, D. H., Caretaker Islands in Dog and Loughborough Lakes	20 00 10 00		
Loon Lakes	3		
Carr and Taylor			
Gartshore, Geo., Inspection Township of Wilson	86 00		
Guthrie, William, Caretaker Devil's Island Hunt, John McKay, Inspection of lots in Townships Dorion, Oliver and Marks	11 61		
McCormack, John, Inspection of lots 3 and 4, N. side of Manchester Street, Village of Warwick			
McDonell, Angus, Inspection Township of Burns Macinnes, W. J., Estimation of Lands Reckie, A. E., Inspection Township of Wilson	270 00		
Smith, James, Inspection of lots in Townships of Southworth, Sanford, Dryden	105.00		
Barrie	5 00	002.00	
		903 89	40,475 76
OTTAWA.			
Darby, E. J., Agent		1,250 00 833 33	
Disbursements	52 90	427 90	0 511 00
QUEBEC.			2,511 23
·		975 00	
Nicholson, Byron, Agent	156 25 410 30	875 00	
		- 566 55	1,441 55
WOOD RANGING.			1,111 00
Allen, R. A. Ansley, J. J. Arnill, William. Barrett, Thomas.		1,245 00 760 00 252 00 1,125 00	
Carried forward		3,382 00	44,428 54
Carriea jorwara	j • • • • • • • • • • • • • • • • • • •	. 0,002 00	11,120 01

Service.	\$	c.	\$	c.	\$	c.
Brought forward			3,382	00	44,428	54
Wood Ranging.—Continued.						
Bates, Robert	· · · · · ·		532	00		
Bliss, Lidden			235			
Bliss, L. E		00			•	
Disbursements	90	39	040	20		
Cameron, Alex		,	940 220			
Carter, George	• • • • • •	• • • •	1.225			
Carson, Samuel	• • • • • •	• • • • •	190			
Castonguay, A. C.			695			
Chenier, D			1,480			
Clarke, R. H			55			
Collector of Customs			17	50		
Coyne, Phin			490			
Corrigan, R. T.	• • • • •		965			
Didler, Peter	• • • • •		640			
Dodds, William	• • • • • •	• • • • •	155			
Dodds, Thomas	• • • • •		309			
Durrell, William	• • • • •		$1,165 \\ 115$			
Ewan, John.	• • • • •		288			
Fisher, George			710			
Fitzgerald, E. C.	1,085	00	• • • • • • • • • • • • • • • • • • • •			-
Disbursements	121					
			1,206	28		
Foster, E. G			713			
Fraser, William			870	00		
Gorman, J. P			414	23		
Gordon, Joseph			175			
Hartley Charles			1,090			
Hatch, J. W.			100	_		
Hawkesbury Lumber Co			10			
Henderson, Charles, Disbursements	• • • • • •	••	76 60			
Herring, E. C			165			
Hornick, George.			175			
Huckson, A. H			830			
Hurdman. W H			450			
Hutton, John	100			ĺ		
Disbursements	35	25				
			135	1		
Irwin, C. W.				50		
Kerr. Charles D			60			
Kelly, Joseph			152			
Lee, James B. Londry, W. E.	••••	• • • • •	665 99			
McCaw, John G.	630	00	33	02		
Disbursements	14					
Disortisetteres			644	70		
McCreight, John	1,300	00	011	.		
Disbursements	129			Į		
_			1,429	04		
	1,255		,			
Disbursements	42	39				
<u> </u>			1,297	39		
McDonald, Thomas			216			
McDonell, J. A.	• • • • •		50	00		

Service.	\$	c.	\$	c.	\$	c.
Brought forward			24,894	75	44,428	3 54
Wood Ranging.—Continued.						
McDougall, James T., disbursements	230		19 215	95 00		
Disbursements			$\substack{ 314 \\ 1,115 \\ 500 }$	00		
Macdonell, R. D	1,125 39	00 50	1 101			
MacGillivray, Duncan D	114 4	00 20	1,164	50		
Mackey, L. R. Mackie, Nathan Manice, William Margach, William, disbursements Margach, J. A.	272	00	118 275 514 1,095 197	00 00 00		
Disbursements Matheson, William Disbursements	1,125	75 00 30	276	75		
Menzies, Alex	1,310		1,153 1,015			
Morley, J. R. Muir, Angus Murray, William Nash, John Disbursements	401			00		
Newburn, William Dliver, J. A., disbursements Porter, H. R. Ragon, Joseph.	175	00	406 785 40 100	00 59		
Disbursements Ridley, Robert Rogers, F. W. Roos, George Shaw, George Shaw, Alfred Shields, Foster	120	00	184 720 355 35 570 510	00 00 00 00		
Disbursements	1,015		2 06	56		
Disbursements Smith, Dryden Thompson, George S. Disbursements	780	00	1,071 50	00 00		
Fappin, Thomas, disbursements Urquhart, A.			794 14 795	30		
Carried forward			42,120	97	44,428	

Service. \$ c.	\$ c.	\$ c.
Brought forward	42,120 27	44,428 54
Wood RANGING.—Concluded.		
Vincent, H. T. 440 00 Wagner, Fred 440 00 Disbursements 70 75	915 00	- 3
Wagner, F. W	— 510 75	
Watts, George Weston, Frank R., disbursements Whelan, P. J. Wood, W. D. Yuill, Thomas	20 30 1,345 00 456 92	46,656 69
EXPLORATION AND ESTIMATION OF TIMBER BERTHS.		10,000 00
Burns, William	1	
Cox, T		b
Fraser, Duncan Kinney, W. 92 00 Disbursements 7 80		-
McCreight, John		
Margach, William Milligan, Wallace. Oliver, J. A. Taylor, John Watts, George	905 44 208 00 1,025 00 701 95 100 00	4,536 68
Fire Ranging.		
Acheson, Lloyd		
Adsett, F. V. 322 50 Disbursements 23 40		
Algoma Central and Hudson Bay Co.'y. Algonquin Lumber Co. Allen, T. W. E. Disbursements 33 85		
Allin, G. C. 342 50 Disbursements 18 95		·
Allison, M. B	361 45	
	377 75	

Service.	\$ c.	\$	c.	\$	c.
Brought forward		2,641	08	95,621	9:
FIRE RANGING.—Continued.		•			
Anger, Leon	$\begin{array}{ccc} 222 & 50 \\ 3 & 70 \end{array}$				
Armstrong, W. J. Armstrong, R. Armstrong, J. C. Arnott, William Arnill, R. Arnup, J. Disbursements		226 75 115 131 131 129	00 00 00 00		
Atkinson, T. A. Aylward, James Baird, J. McC. Disbursements		348 132 48		,	
Baker, B Baldwin, J. P Disbursements	152 50 26 90	265 150	00		
Baldwin, Roy	152 50 29 40	179			
Bateman, W. R	362 50 62 15	181	90		
Barnhart, Ernest	307 50 7 13	424	65		
Bayes, Roderick. Disbursements	285 00 10 60	314	63		
Beaudry, John	222 50	295 131			
Beck, C. Mfg. Co. Belanger, John. Belanger, E. Disbursements		226 103 80	35		
Belfry, R	325 00 22 85	382	35		
Bennett, G. A. disbursements Benson, J. B. Bell, John H. Berlet, O. R. Disbursements		347 3 131 125	80 00		
Birmingham, E. B. Bissaillon, John Disbursements	825 00 361 98	347 225			
Bisaillon, James Disbursements	225 00 10 75	1,186	98		
		235	75		

. Service.	\$ c.	\$ c.	\$ c
Brought forward		9,315 69	95,621 9
Fire Ranging.—Continued.	-		
Bliss, L. E Disbursements	750 00 1,440 30	2,190 30	
Booth, J. R	322 50 6 20	435 33	
Boleau, J	347 50	328 70 131 00	
Disbursements	19 55	367 05	
Bonnycastle, R. H	330 00 68 60	208 60	
Boucher, W	347 50 2 90	398 60	
Brasher, S. M	312 50 6 20	350 40	
Brazeau, X	260 00 5 00	318 70	
Breadon, L. H. M	320 00 16 40	265 00	
Brennan, M., & Sons		336 40 310 64	
Brennan, R. L Brennan, Dan		122 00 49 00	_
Bridgman, PBrooks, M. C.		128 00 93 00	
Brooks, F. WBromley, Ed. H		131 00 108 00 67 00	
Brown, HenryBrown, J		131 00	
Brownlee, Sam		43 00 131 00	
Bruce, George Disbursements	345 00 18 65	363 65	
Brunet, Alphonse	355 00 17 70	68 00	
Disbursements		372 70 325 50	
Burger, William Disbursements	$\begin{array}{cc} 315 & 00 \\ 13 & 75 \end{array}$	200 55	
Burns, W		328 75 275 00	
Burns, G	250 00 30 85	800.05	
Burns, William		$280 85 \\ 131 00 \\ 101 00$	
Campbell, J. L. Disbursements	500 00 256 11		
		756 11	
Carried forward		18,753 37	95,621

Service.	\$	c.	\$	c.	\$	c.
			18,753	37	95,621	91
Brought forward						
FIRE RANGING.—Continued.						
Campbell, Archie				00		
Campbell, A. J	34	2 50	99	00		٠
Disbursements	0.	3 95	0.40		-	
Campbell, W	34	0 00	346	45		
Disbursements	2	2 15	200	1-		
Campbell, R			362 122			
Campbell, Bruce			131	00		
Canadian Copper Co.				00		
Card, W	33	2 50	1	00		
Disbursements	4	5 50	378	00		
Carnochan, G		2 50		00		
Disbursements	2	6 80	359	30		
Carney Lumber Co			44	00		
Cartier, A		5 00	292	50		
Disbursements		2 60				
Cassidy, James	46	00 00	377	60		
Disbursements		4 40		4.0		
Charlton, W. R	3			40		
Charlton, J & T1908	3			00		
Charlton, J. & W. A				00		
Chaput, Isadore190	13	31 00				
do1909	15	31 00	262	00		
Chambers, E. V.		37 50				
Disbursements		24 15	361	65		
Chambers, J. R		$egin{smallmatrix} 5 & 00 \ 1 & 60 \end{bmatrix}$				
Disbuisements	·	1 00		60		
Chamberlain, E. H			1	00 5 00		
Chevier, Charles	. 31	15 00	100	, 00		
Disbursements	. 4	18 65	369	65		
Christie, W. J.			95	00		
Christilaw, Henry			131	00		
Clark, David			72	2 00		
Clarke, S. C. Disbursements	. 35	52 50 24 70				
	`		377	7 20		
Clarke, R. HClarkson, G. E	• •		158 121	5 00 L 00		
Clement, G. H	. 25	$52 \ 50$	101			
Disbursements		25 25	277	7 75		
Carried forward	.1		25,017	7 62	95,62	1

Service.	\$	c.	\$	c.	. \$	c.
Brought forward			25,017	62	95,621	91
Fire Ranging.—Continued.						
Cline, George Disbursements		$\begin{array}{c} 00 \\ 20 \end{array}$	100	90		
Clysdale, A			193 131			
Coderre, A				00		
Coghlan, Samuel J	295		30	00		
Disbursements	20		315	05		
Coghlan, Thomas			131			
Collins, James			110			
Colway, G. H	•••••			00 85		
Conlin, John			103			
Conger Lumber Co			14			
Constantine, E			131 131			
Corrigan, M. B			131			
Cooney, James C	• • • • • • • •	• • • •	131			
Cottenham, William			131 51			
Coughlin, Herbert			131			
Coulter, Charles	345	00				
Disbursements	18	55	363	55		
Cousineau, A	327 8	50 90				
Cox, Joseph			336 128			
Coyne, Phin	594					
Disbursements	175	56	769	98		
Crawford, Ephraim	$\begin{array}{c} 307 \\ 2 \end{array}$					
Crawford, C. M	322	50	309	70		
Disbursements	65		200	05		>
Cross, J.			388 282			
Croteau, Euzebe	• • • • • • •		131			
Cruise, W. W.	310					
Disbursements	21 3	50	331	35		
Cunningham, L. E			50			
Cunningham, J			131			
Curtin, David			131 131			
~ '-	· • • • • • • • • • • • • • • • • • • •		131			
Cuthbertson, W	• • • • • • •	•••	131			
Dane, A	632 (00	131	00		
Disbursements	42					
Darly, William	305 (00	674	/5		
Disbursements	2 2					
-			307	20		_
Carried forward		ا	31,957	25	95,621	91

Service.	\$	c.	\$	c.	\$_1 <u>1</u> c
Brought forward			31,957	25	95,621 9
FIRE RANGING.—Continued.					
Davie, W. H		50 85	348	25	
David, Antoine	350		103 146	00	
Disbursements		00	372	00	
Decoteau, Alex	302 236		131		
Dedine, Joel	367		538	50	
De Guerre, Claude	342		368	65	
Delahaye, A. L Disbursements	210		370	20	
Dempsey, J Desantils, Noe			241 131 13		
Deschamps, F. Disbursements	240 12	00			
D'Eye, H. D	265 24	00 78	252		*
Dewar, William		00	289		
Dixon, L. A	360 50	00 05	80		
Dixon, J. H	302 21		410		
Dodds, James	130	00 90	324	15	
Dolan, A	305 5	00 10	133	90	
Dolan, E	305 5	00 10	310	10	
Doherty, A	265 28	00	310	10	
Donald, Robert	355 27	00	2 93	30	
Donahoe, L	280		382	20	
Disputscancing			286	30	

Service.	\$ c.	\$	c.	\$ c.
Brought forward		37,791	93	95,621 91
FIRE RANGING.—Continued.				
Dow, W	312 50	125	00	
Disbursements	18 55	331	05	
Dreany, Alex Disbursements	342 50 2 80	215	20	
Drescoll, James		345 3 108 0 131 0	00	
Driver, J		131 (00	
Dufond, Ignace		90 (80 (
Duncan, Robert	$\begin{array}{ccc} 307 & 50 \\ 246 & 00 \end{array}$			
Dunn, Frank1908		553 t	00	
Dupuis, Joseph Duquette, H.		38 (131 (
Dwight, Theodore W	· · · · · · · · · · · · · · · · · · ·	135 (135 (00	
Edwards, E. D		560	75	
Egan, D		93 (00	
Eilber, George	$\begin{array}{cc} 347 & 50 \\ 25 & 15 \end{array}$			
Elliott, J	327 50	372 (65	
Disbursements	31 60	35 9]	10	
England, J.	• • • • • • • • • • • • • • • • • • • •	111 (131 (00	
Eno, George	305 00	191 (,,,	
Disbursements	2 75	307 7	75	
Eveline, W		108 (79 (00	
Fairbairn, N. H		111 (00	
Ferguson, E. A	347 50	125 (00	
Disbursements	2 90	350 4	10	
Ferris, R. H. Disbursements	302 50 58 30			
Fidler, S. J.		360 8 10 0		
Fisher, George		532 (00	
Finlayson, J. H		131 0 131 0		
Fitzgerald, J		131 (00	
Flagherty, John Fortune, M.	305 00	122 0	,,	
Disbursements	2 75	307 7		
Foster, John RFraser, W. A.	375 00	131 0	00	
Disbursements	8 05	383 ()5	
Country downsard		45,101 (95,621 91
Carried forward	•••••	40,101 (۱ در	30,021 31

Frechette, O	347 50 14 45 849 60 247 55 312 50 25 75	- 356 131 131 - 361 - 1,097 131 134 - 338 580 74	95 00 00 95 15 00 00 25 00	95,621 9
Fraser, W. G. Disbursements Fraser, H. Disbursements Fraser, John Frechette, O	22 70 335 00 21 95 347 50 14 45 849 60 247 55 312 50 25 75 	- 356 131 131 - 361 - 1,097 131 134 - 338 580 74	95 00 00 95 15 00 00 25	
Disbursements Fraser, H. Disbursements Fraser, John Frechette, O. 1908 Gale, W. J. Disbursements Gagne, F. Disbursements Gagnon, Achille 1908 Gagnon, Noel Ganly, R. J. Disbursements Gemmell, John German, J. P. Gibson, Thomas 1908 Gibson, J. Gibson, M.	22 70 335 00 21 95 347 50 14 45 849 60 247 55 312 50 25 75 	- 356 131 131 - 361 - 1,097 131 134 - 338 580 74	95 00 00 95 15 00 00 25	
Disbursements Fraser, John Frechette, O	21 95 347 50 14 45 849 60 247 55 312 50 25 75	- 356 131 131 - 361 - 1,097 131 134 - 338 580 74	95 00 00 95 15 00 00 25	
Frechette, O	347 50 14 45 849 60 247 55 312 50 25 75	. 131 131 - 361 - 1,097 131 134 - 338 580 74	95 15 00 00 25 00	
Disbursements Gagnon, Achille	247 55 312 50 25 75	- 1,097 131 134 - 338 580 74	15 00 00 25 00	
Gagnon, Noel Ganly, R. J. Disbursements Gemmell, John German, J. P. Gibson, Thomas 1908 Gibson, J. Gibson, M.	25 75	131 134 - 338 580 74	00 00 25 00	
German, J. P. Gibson, Thomas		580	00	
			00 00	
Gillies Bros. Gilpin, William Disbursements	325 00 1 20	394 200		
Golden Lake Lumber Co. Gould, A. Grant, Allen Grant, Robert Graves, Bigwood & Co. Disbursements	• • • • • • • • • • • • • • • • • • • •	46 27 118 619	00 00 00 00 00 90	
Gray, A. H. G. Griffin, James	· · · · · · · ·	419 131 117 131	00 00 00	
	131 00 131 00	386 131 131 262	00 00	
Junter, P. M	345 00 5 80	131		
	335 00 3 75	350	80	
		338	75	

Name of the state	1		1		
Service.	\$	c.	\$	c.	\$ ~ c
Brought forward			53,087	13	95 ,621_9 3
FIRE RANGING.—Continued.					•
					•
Haggerty, F		• • • • •	85 131	00	
Haley, Ed. Hambly, W. R. Disbursements	352	50 00			-
	355	00	372	50	
Hammond, W. H. Disbursements		10	376	10	
Hamilton, G	325				
Disbursements		70	348	70	
Hardy, F	332				
Disbursements	13	50 ———	346	00	
Hand, Thomas			544	00	
Harrison, John & Sons	• • • • • •	• • • • •	131 131		
Harvey, F. R	345	00	101		•
Disbursements	37	15	382	15	
Haskin, W			129	00	
Hatch, James		• • • • •	79 142		_
Hawley, James	322	50	176	00	
Disbursements	54	25	276	75	
Hawkesbury Lumber Company	• • • • • • •		376 226		
Hayes, Joseph	315				
Disbursements	54	99	369	55	
Henderson, Charles	• • • • • • •		428	63	
Hennessy, B. E	247	50	152	70	
Disbursements	63		010		
Hickey, W			310 131		
Hilary, C. E			48	00	
Hillman, J. H. Hillier, John	• • • • • • •	••••	131 50		
Hipwell, Thomas	300		•		
Disbursements	7	30	307	30	
Hiscock, H. G	325		001		•
Disbursements	14	60	339	60	*
Hodge, W. R	285	00	000		
Disbursements	56	65	2/1	65	
Hodgson, John	265	00	341	עט	
Disbursements	36		201	eo	ς,
Hoath, R.			301 130		,
Hooey, George	342				
Disbursements	12	ฮอ	354	85	*
a		-		-	95,621 91
Carried forward	• • • • •	• • • •	60,283	10	90,021 91

Service		\$	e.	\$	e.	\$	c.
Brought forward				60,283	76	95,621	9:
FIRE RANGING.	Continued.						
Holdsworth, J		317	 50 83	94	00	_	
Hughes, James Hudson Bay Company Hunt, J. W Hunter, Lorne Huston, J Hutton, R. B Hurtubise, A	1908		••••	31 132 131 99	00 75 00		
Disbursements Irwin, H. S	• • • • • • • • • • • • • • • • • • • •	360	00	229	00		
Disbursements Irwin, E Irwin, T Jacko, John Disbursements		175	05	411 133 127	00		
Jackson, George		357			00		
Jardine, A. J Disbursements			00	361			
Johnson, Thomas Disbursements		1	5 00 60	321			
Johnson, H. C		305	6 00 9 82	236 127			
Jordan, William Disbursements			0 00 8 45	314			
Judge, S Disbursements			00 65	363			
Kelly, Ed Disbursements			00 50	357			
Kelly, John Keily, M Disbursements			7 50 1 00	223 131	00		
Keen, Walter Keenahan, Matt Disbursements		362	2 50 1 25	301 105			
Kennedy, Robert Kerby, John Kerr, A. W. King, F. J.				103 131	00		
						95,621	

Service.	\$	c.	\$	c.	\$	c.
Brought forward			66,159	66	95,621	91
Fire Ranging.—Continued.		*				
King, James	92 131	00 00			•	
Kring, W. A. Kruger, A. P. Disbursements	270	00 25	223 113			
Labelle, A Disbursements	360 21	00 20	274	25		
Lafleur. Thomas Lafrance, Thomas Lang, James	320		381 100 131 52 143 80	00 00 00 00		
Lavoie, X. Law, W. J. Lawson, E. Disbursements	347 25	50	322 131 131	00		
Legary, Frank	846 189	21	372 154 1,035	25		
Leach, W. J	277 13		201	15		
Leblanc, Fred Leblanc, Mathias Lennox, T. C. Disbursements	337 24		291 222 131	50		
Ledward, T. H. Lindop, H. Livingston, A. Long, H. E.	640	00	362 90 1 84	00 13		٠
Lorenz, Fred Lorenz, Charles Lorenz, William Lougheed, R. J. Disbursements	330	00	651 131 136 80	00		
Loveland & Stone Lovering Lumber Co. Lunan, W. A. Lusk, William Disbursements	305	• • • • •	356 32 43 235	50 50		
Lynn, W	220		306	30		
			223	50		

Fire Ranging.—Continued.	\$ (c.		\$	c.
McArthur, E. C. 332 50 Disbursements 17 00 McArthur, G. J.	181 8	85	ĺ	95,62	1191
Disbursements					
McArthur, G. J. 380 00 McCaw, James 380 00 McCaw, Useley 76 70 McCagherty, P. 200 0 McCalled, Jerry McCalled, Jerry McClalland, Robert 16 00 McColl, Archibald McCombe, Alex. McCormack, Walter McCormack, Walter McCullech, Chris 555 00 Disbursements 33 85 McCulloch, David 402 50 Lisbursements 21 90 McDermott, Alex. 1 McDermott, W. B. 315 00 Disbursements 22 40 McDonald, Dan 300 00 Disbursements 362 50 McDonald, James 362 50 Disbursements 10 80 McDonald, Alex 3 McDonell, G. D. 1 McDougall, J. T. 5 McGuay, Dennis 1 McGuay, Dennis 1 McKenzie, Robert 2 McKinnon, H. 330 00 Disbursements 35 35					
McCagherty, P. McCauley, Jerry McClelland, Robert	349 5 9 5 132 0 131 0	53 00 00			
McColl, Archibald 1 McCombe, Alex 1 McCormack, Walter 1 McCullech, Chris 555 00 Eisbursements 33 85 McCulloch, David 402 50 Lisbursements 21 90 McDermott, Alex 1 McDermott, W. B. 315 00 Disbursements 22 40 McDonald, Dan 300 60 Disbursements 10 80 McDonald, James 362 50 Disbursements 13 50 McDonald, Alex 3 McDonald, A. J. 1 McDonald, A. J. 1 McDonald, J. T. 5 McGuay, Dennis 1 McIver, H. 345 00 Disbursements 25 70 McInnis, D. C. 30 00 McKenzie, Robert 2 McKinnon, H. 330 00 Disbursements 35 35	456 7 115 0 123 0 80 0	$\begin{array}{c} 00 \\ 00 \end{array}$			
McCulloch, David 402 50 Lisbursements 21 90 McDermott, Alex. 1 McDermott, W. B. 315 00 Disbursements 22 40 McDonald, Dan 300 00 Disbursements 10 80 McDonald, James 362 50 Disbursements 13 50 McDonald, Alex 3 McDonald, G. D. 1 McDougall, J. T. 1 McFadden & Malloy 1 McGuay, Dennis 1 McInnis, D. C. 3 McKenzie, Robert 2 McKinnon, H. 330 00 Disbursements 35 35	251 0 131 0 131 0 94 0 131 0	00 00 00	•		
McDermott, Alex. 315 00 McDermott, W. B. 315 00 Disbursements 22 40 McDonald, Dan 300 00 Disbursements 10 80 McDonald, James 362 50 Disbursements 13 50 McDonald, Alex 3 McDonald, A. J. 1 McDonald, J. T. 5 McGauay, Dennis 1 McGuay, Dennis 1 McIver, H. 345 00 Disbursements 25 70 McInnis, D. C. 3 McKenzie, Robert 2 McKinnon, H. 330 00 Disbursements 35 35	388 8	85			
McDonald, James Disbursements 362 50 McDonald, Alex 3 McDonald, A. J. 1 McDonell, G. D. 1 McDougall, J. T. 5 McGuay, Dennis 1 McIver, H. 345 00 Disbursements 25 70 McInnis, D. C. 3 McKay, Angus 1 McKenzie, Robert 2 McKinnon, H. 330 00 Disbursements 35 35	24 4 106 0 137 4	00			
McDonald, Alex 3 McDonald, A. J. 1 McDonell, G. D. 1 McDougall, J. T. 5 McFadden & Malloy 1 McGuay, Dennis 1 McIver, H. 345 00 Disbursements 25 70 McInnis, D. C. 3 McKay, Angus 1 McKenzie, Robert 2 McKinnon, H. 330 00 Disbursements 35 35	10 8	80			
McInnis, D. C. 3 McKay, Angus 1 McKenzie, Robert 2 McKinnon, H. 330 00 Disbursements 35 35	76 00 66 00 32 00 31 00 22 39 21 00 31 00	60 00 60 39 00			
3	80 70 95 00 46 00 50 00	00 00			
McLachlin Bros. McLaughlin, J. S.	65 35 64 00 26 00 2 00 50 00	00 00 00 00			

· Service.	. \$	c.	\$	c.	\$	c.
Brought forward			80,184	47	95,621	91
Fire Ranging.—Continued.						
McLeish, W. J. McLeod, William Disbursements	287 8	50 40	140 295			
McLeod, Dougald McLelland, James Disbursements	312	50 75	65	00		
McMahon, M. McMillan, D. H. Disbursements	295	00 70	344 122			
McMillan, V. Disbursements	340 28	00 05	306			
McMullen, Alex. McNeil, E. H. Disbursements	300	00 90	368 118			
McNichol, William J	282	50	35 2 89	90 00		
Disbursements McPherson, W. C. Disbursements	$ \begin{array}{r} $		303	80		-
McQuabie, Henry McQuay, B. McQuay, J. McRae, J. D. McRae, D. Disbursements		50	367 82 105 104 460	00 00 00		
MacBeth, R. E. Macdonald, J. D. Macfarlane, R. L. MacGillivray, E. F. Disbursements		00	355 82 133 112	00	•	
Mackie, Thomas Disbursements	317		243	00		
Madigan, W. J. 1908 Madigan, W. Magner, Thomas Maguire, T. C.	 25 5	 00	131	00		
Disbursements Maher, Thomas Mairs, Eli Malloy, Mark Manning, William	345	00	50	00		
Disbursements		97 15	373	00		
Margach, William, disbursements1909		10	511	12		

Service.	\$	c .	\$	c.	\$	c.
Brought forward			86,598	69	95,621	9
FIRE RANGING.—Continued.						
Martin, A. J	$\frac{327}{22}$	50 55	2.0			
Martin, Thomas	305	00 00	350 131			
Disbursements			· 311 131	00		
Marshall, William			252 131			
Menard, E. Disbursements	320 2	70	322	70		
Merchant, John, disbursements Merchant, Herbert Mercier, W			24 290 130	00		
Mickle, Dyment & Son 1908 Middleton, John 1908 Middleton, John 1909	131 131	00	113	75		
Midland Lumber Co	322		262 13			
Disbursements	$\frac{25}{352}$	95 50	348	45		
Disbursements		80	359 105		4	
Milne, S. Millichamp, F. A. Disbursements		50	79			
Mitchell, James Disbursements	345 15	00	319	50		
Mitchell, J			360 110			
Mole, W. H	15	65	353	15		
Montgomery, W	310 40	80	350			
Montroy, J. J			131 132 131	00 00		
Morton, R. R. Morand, L. Disbursements	335		23	00		
Moore and Moulthrop	810 452		343	80		
Moore and Macdonald			$ \begin{array}{r} 1,262 \\ -53 \\ -78 \\ 26 \end{array} $	00		
Morris, J	• • • • • • •	• • • •	36	00		

Service.	\$	c.	\$	c.	-\$	c.
Brought forward			93,664	09	95,621	91
FIRE RANGING.—Continued.						
forrison, W. F1908	••••		80	00		
forrison, H. L Disbursements		50 90				
Iorrison, John			346 131			
forrin Paul				00		
foulthron G. H			101	00		
Iounsteven, J	· · · · · · ·		175	00		
Iurray, Thomas1908	307	50	141	00	- 7	
Iurray, Z		30				
Disbuiscincing			311			7.
Iurphy, J	332	50	131	00	•	
Iancekivelle, Thomas		65				
	345	00	359	15		
leely, A. H		65				
!			367	65 00		
Netterville, William	• • • • • •	•••••	560			
Jewburn, William				00		
Newell, John	342	50 25				
Disbursements			364	75		
Nichol, Dan		• • • • •	131		·	
Vicholson, A		• • • •	129 13	00		
Vinissing Lumber Co			4	69		
Volan, C		••••	131	00		
Northern Timber Co			_ 131			
Nundy, George		7 50				
Disbursements		3 40	340	90		
O'Brien, Phil			102	00		
O'Connor, L	••••	• • • • •		00		
Oliver, J. A			535	44		
O'Neil, P. F.	22	5 00	57	00		
O'Neil, W. S		7 80				
Ontario Lumber Co1908				80 50		
O'Keefe. Thomas			105	00		
Duingue, J				00		
Owens, R				00		
Parlow. A	. 550	00				
Disbursements		5 50	366	50		
Pateman, E		2 50				
Disbursements		3 30	305	80		
Carried forward	1				95,62	

•			
Service.	\$ c.	\$ c	\$ c.
Brought forward		100,561 4	95,621 91
FIRE RANGING.—Continued.			
Patterson, B. C. Disbursements	292 50 19 40		
Patterson, William 1908 Paul, H. S., disbursements 1908 Paquette, O. 1908 Pearce Lumber Co. 1908 Pelow, Robert 1908 Pembroke Lumber Co. 1908 Pepeguis, Angus 1908 Perrault, A. 1908 Perrault, W. N. 1908 Perrigo, A. 1908 Phillion, A. W. 1908 Phillibin, T. H. 1908 Platt, S. Disbursements	322 50	123 0 41 8 15 0 131 0 935 0 79 0 131 0 131 0 131 0	0 0 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Playfair and White		377 6 49 2	5
Poulin, D	357 50 46 85	357 5	
Poulin, William	335 00 46 85	404 3	5
Ponninville, Joseph	337 50 25 65	381 8 131 0	
Powell, Abner Power, J. P. Disbursements	337 50 5 40	363 1 132 0	0
Price, R	332 50 26 80	342 9	0
Pringle, A Disbursements	345 00 26 50	359 3	0
Proulx, A	342 50 5 20	371 5 192 7	
Quilty, John	337 50 39 15	347 7	0
Ranger, P	257 50 11 25	376 6	5
Rathbun Co	30 08 1 50	268 7	
4		31 5	
Carried forward		107,435 3	95,621 91

Service.	\$	c.	\$	c.	\$	c.
Brought forward			107,435	34	95,621	91
FIRE RANGING.—Continued.						
Regan, J. Reid, Adam 1908 Renand, Cypien 1908 Renand, Nels Disbursements	245		118 105 131	00		4
Reynolds, N		50 98	246			
Rhoades, F. M		50	285	48	•	
Richardson, Sam Disbursements		50	304	65		•
Richardson, Stanley	267	50	307	60		6
Disbursements	322	2 50		13 00		
Ritchie, R. and T	325	5 00		40 00	*	
Roche, H	337	7 50	382	90	-4	
Disbursements	75	5 00	368	50		
Rogers, Fred	332	2 50	14	00 00 00		
Possibursements	340	0 00 2 70	358	95		
Disbursements Ryan, J. Scantlin, James Scheich, J. Scott, Robert Scott, Howard	342	2 50	131 105 81	70 00 00 00 00	٠.	
Disbursements	277	3 45 7 50 0 00	293	95 00 00		
Disbursements Sheridan, William Shields, G			85 61 118	50 00 00 00 00		
Carried forward	í				95,621	,91

Service.	\$ c.	\$	c.	\$
Brought forward		113,689	50	95,621
FIRE RANGING.—Continued.				
		116	00	
icard, Frank		119	00	
Bills, Charles Disbursements	280 00 50 95			
		330		
impson, Alex.	107 50	11	00	
meltzer, J. H	7 50		-	
2 Industrial Control of the Control		195	00	
mith, J. B., and Son1908		41	00	
mith, A. L.	$\begin{array}{c} 347 & 50 \\ 22 & 55 \end{array}$		and the same of th	
Disbursements	22 00	370	05	
mith, W. I		130		
mith, B		119		
mith, Charles				
mith, William		131 131		
mith, John Paper Co		0.40		
pohn, P. D1908	• • • • • • • • • • • • • • • • • • •	101		
t. Anthony Lumber Co		13	50	
t. Dennis, Charles1908	• • • • • • • • • • • •	163		
t. Pierre, Fred	320 00	45	00	
tevenson, W. O	50 00			
Disputsements		370	00	
tevenson, William			00	
tewart, J. A1908	305 00	159	25	
tewart, Charles	34 35		Ì	
Disbursements		339	35	
tewart, D. R	· · · · · · · · · · · · · · ·		00	
tewart, R. M.		131		
tillar, F.		72 131		
traus Philiptrong Lumber Co.		234		
troud, A. M.	320 00			
Disbursements	60 60		1	
In 174 Table		380		
dullivan, John		292 127		
butter, F. J.		1.0	00	
Disbursements	60 15			
		382		
wale, William	345 00	119	00	
Panton, T. L	25 55		ţ	
		370	55	
'aylor, G. S	327 50			
Disbursements	19 75	0.47	0.5	
'aylor, Dean	337 50	347	25	
Disbursements	34 40			
		371	90	
eeter, J		105		
'hibert, P	260 00		- 1	
Disbutsements	9 00	269	00	
1		209	00	

Service.	\$	c.	\$	c.	\$	C.
Brought forward	·		120,425	52	95,621	l 9:
FIRE RANGING.—Continued.						
Thomas, James	257	50 05	133	00		
Fodd, C. C. Disbursements	307	50	284	55		
Fowers, Oratus				70 00		
Furrell, V. L	16	50 35	358	85		
Furner Lumber Co. 1908 Furner Lumber Co. 1909	411	97	416	97		
Townsend, Ernest Jrquhart, A. Vaillant, G. Vallincourt, D.	325		131 536	00 00 00		
Disbursements Valentine, David Vankoughnet, R. Varcoe, Fred Disbursements	335		122	95 00 00	٠	
Vaughan, C. Disbursements	285	00	391	10		
Vennette, John	342		131	40 00 50		
Wagner, H. W	338	5 00	160	00 00 00		
Disbursements Wallace, S. Wallace, Sam Wallace, E. Wallace, George Walker, Robert	282	2 50	131 131 131 131	50 00 00 00 00		
Disbursements	360	000		00		
Disbursements	337	50	150	50 00 25		
Disbursements		40	339	90		

Service.	\$ c.	\$ c.	\$ c
Brought forward		127,280 69	95,621 9
FIRE RANGING.—Continued.			
Watts, George		653 07	
Watson, William Disbursements	307 50 7 30		
Wattie, T. D.		314 80 97 00	
Weir, G. A		330 00	
Wendt-Wreidt, A. J. P. Disbursements		316 45	
Webster, H.		131 00	
Wilder, H. J			~
Williamson, H	347 50		
Disbursements	41 80	889 30	
Wilson, G. A		82 00 58 00	
Wilson, Edward		58 00	
Wilson, R	285 00		
Disbursements	3 25	288 25	
Wilson, I. W	• • • • • • • • • • • • • • • • • • • •	80 00 157 00	
Winters, John W		66 00	B control of the cont
Whyte, J. T. G		125 00	
Woodcock, George	337 50	220 00	
Disbursements	3 35	340 85	
Wolverine Cedar & Lumber Co. 1908 Wolverine Cedar & Lumber Co. 1909	19 50 78 50	98 00	
Wright, Colin	200 00	98 00	
Disbursements	13 60	213 60	
Young, R. J		131 00	
Young, D	$\begin{array}{c} 280 \ 00 \\ 8 \ 45 \end{array}$		
		288 45	
Zumstein, E. W	$\begin{array}{ccc} 267 & 50 \\ 36 & 30 \end{array}$		
		303 80	120 007 04
FOREST RESERVE.			132,827 26
Temagami Reserve.			
\$38,927.62 Allan, David	367 50		
Disbursements	14 55	222.02	
Baker, C. R.	332 50	382 05	
Disbursements	16 05	240 55	
Barrett, Thomas		348 55 100 00	
Berkley, G. L	265 00		
Disbursements	10 88	275 88	
Carried forward		1,106 48	228,449 17

Service.	\$ c.	\$ c.	\$ c.
Brought forward		1,106 48	228,449 17
Forest Reserve.—Continued.			
Temagami Reserve.—Continued.			-A.
Bond, St. George	325 00 19 45	125 00	
Brown, E. W. Disbursements	325 00 19 50	344 45	
Burroughs, C. M. Disbursements	332 50 12 05	344 50	
Buisson, William	262 50 6 03	344 55 300 00	•
Disbursements	252 50 6 65	268 53	
Clarke, W. K	327 50 14 05	259 15	
Copping, R. V	325 00 16 05	341 55	
Davidson, E. I	295 00 16 05	341 05	
Deacon, W. A	315 00 16 05	311 05	•
Dobson, Harold	312 50 20 30	331 05	
Donovan, J. A. Duncan, J. M.	330 00 16 05	332 80 160 00	•
Disbursements	332 50 16 05	346 05	, .
Evans, R. Disbursements		348 55	
Faries, R	327 50 16 05	218 55 1,115 00	
Fennell, T. H. Findlay, H. Disbursements		343 55 205 00	
George, Ruggles	315 00 16 05	330 70	-8-
i		331 05	228,449 17

. Service.	\$	c.	\$	c.	\$		c.
Brought forward			8,148	61	228,4	49 :	17
Forest Reserve.—Continued.							
Temagami Reserve.—Continued.							
Gordon, Thomas		50 05	226				
Freenwood, J. Y		50 05	336				
Hagerman, G. Disbursements		00 60	324				
Hall, Morton Disbursements		50 05	294				
Haywood, James Disbursements		00 05	328				
Herliky, Dan		00 65	329				
HIII, M. Disbursements		50 65	351				
Hodgins, E. P		50 55	369				
Hodgins, Lyali		50 85	388				
Huggard, A. E		00 05	361				
Hutchison, J. Jackson, W. Disbursements	335	i 00 3 90	350 125 353	00			
James, C		50 00					
Jamieson, R. A		50 3 20	368				
Jardine, A. J		000		00			
Keeley, A. J		5 00 5 75	349				
Keys, A. B		2 50 3 65		75			
King, Charles L		0 00		15			
			320	00			

Service.	\$ c	\$. \$	c.	\$	0.
Brought forward		13,921	71	228,449	17
Forest Reserve.—Continued.					
Temagami Reserve.—Continued.					
Knox, J. E Disbursements	312 5 16 0				
Lamarche, A. Lamarche, Charles Ladouceur, David Disbursements	47 5	222	00	,	
Lampson, L	335 C 18 8	00	20		
Lavigne, Louis	852 8		85		
Lawson, G. W	305 (17 2	00	15		
Leach, F	327 5 23 7	50	20		
Leach, W. J	245 (22 5	27	25 50		
Leitch, J. M	295 (14 (00	50		
Le Seuer, N. L	325 (22 S	00 95	05		_
Lloyd, Hoyles	340 (14 8	00	' 95		
Lougheed, R. J. Lunny, J. W.	285 (20	55 00		
Disbursements		33 299	15		
Milligan, G	367 8	${50}$ 2,804	18		
Montgomery, A. McCallum, P. McCammon, J. G. McCart, E.	320	250 140 250	55 00 00 00 00		
Disbursements		348	3.10		
Disutt sements			03		

Service.	\$ c.	\$	c.	\$ c.
Brought forward		23,152	97	228,449 17
Forest Reserve.—Continued.				
Temagami Reserve.—Continued.				
McDonald, Charles McDougall, Eric Disbursements	307 50 12 05	100	00	
McKenzie, C. H	325 00 11 60	319		
McNaughton, F. Disbursements	550 00 56 40	- 336		
McNulty, E	337 50 13 55	606	40	
McPhee, D. J. Nelson, George Disbursements	310 00 10 80	351	05 00	
Nesbitt, B	332 50 14 85	320	80	
O'Connor, J	237 50 5 80	347	35	
Paloquin, N	312 50 7 90	243	30	
Petrant, William Phelps, R. C. Disbursements	335 00 18 40	320 362	50	
Platt, S	227 50 9 55	353		
Prudhomme, Ad Disbursements	$\begin{array}{ccc} 400 & 00 \\ 22 & 95 \end{array}$	237		
Raney, Fraser	332 50 16 05	422	95	
Reed, W. J	325 00 16 05	348	55	
Reid, John A	337 50 26 30	341	05	
Rhodes, Harold	325 00 16 05	363	80	
Richards, K	335 00 16 05	341	05	
Rochon, Joseph	340 00 17 90	- 351 790		
	11 20	357	90	
Carried forward	• • • • • • • • • • • • • • • • • • • •	30,387	72	228,449 1

Service.	\$	c.	\$	c.		\$	c.
Brought forward			30,387	72	228,	449	17
Forest Reserve.—Continued.							7
Temagami Reserve.—Continued.							
Savage, D. H		50 05	343	55			
Scandrett, W. L		50 05	338				
Scott, W. R		50 45					
Sharp, A. H		00 70	356	*			
Shelson, H		50 80	342				a
Simpson, W. C		000	350	30			
Skinner, P		00 05	347	30፷			
Spereman, James		00 45	351	05			
Spence, William, Jr		50	339	45			
Stark, W. B		00	332	20 🕿			
Stewart, Charles			347			_	
Disbursements	18	75	. 333	75			
Stuart, Cecil	16	00 05	326	05 🖼			
Sweeney, D	21	75	331	75 2			
Tait, Joseph Disbursements		00 25	336	25 😸			
Thompson, F		00 45		145 ⊊			
Thompson, G. S	315 12	00	327				
Thompson, J. C,		50 40	-				
Carried forward			358 36,219		228,	449	-

Service.	\$	c.	\$	e	\$	c.
Brought forward			36,219	07	228,449	1
Forest Reserve.—Continued. Temagami Reserve.—Concluded.						
Turner, John Turner, Joseph Tutt, W. R.		 	372 340			
Disbursements	14	05	324	05		
Tytler, Norman B		$\begin{array}{c} 50 \\ 05 \end{array}$				
Vivaris, D. Disbursements		00 60	348			
Whitesides, J. R		00 80	723			
Willis, G. C. Disbursements		00 05	342			
Metagami Reserve. \$95,816.77			257	05		
Adams, G. W		$\begin{array}{c} 00 \\ 70 \end{array}$				
Beauchamp, A			339 357 170			
Bruce, T. L. Disbursements	335 16	$\frac{00}{70}$	951	70		
Burden, John	620 439		351			
Clark, Frank Disbursements	315 22	00 50	1,059			
Dowling, Charles	342 21	50 65	337 364			
Eveline, Andrew Fuller, Carlos	297	50 15	360			
Disbursements Howard, R. N. Kitt, A. N.			320 175			
Disbursements		20	313	20		
Laurence, Robert Lewis, R. G. Disbursements	187	 50 35	295			
Lyons, Harold	320 20	00 55	196	85		
Shearme, William	332 13	50 40	340	55		
Steape, E. D. Wodehouse, R. P. Disbursements	322 17	50 20	345 150			
	11		339	70		

Service.	\$	c.	\$	c.		\$	c.
Brought forward			44,744	39	228	449	17
Forest Reserve.—Continued.							
Mississaga Reserve.—Continued.							
\$8,653.04							
Arnill, Lorne Disbursements		$\begin{array}{c} 50 \\ 60 \end{array}$	249	10			
Albright, L		50 00	342			9	
Bothwell, George	330 23	00 45	353		1		
Boyd, W. J Disbursements	322 24	50 10					
Clark, Alfred	312 19	50 00	346	-			
Clark, Karl A Disbursements	342 16	50 70	331				
Dean, Thomas	320 16	00 20	359				1
Emery, E. V	310 18	00 70	336				
Foote, Walter S	237 15	50 85	328	22			
Graham, Summer W	335 18	00 70	253	35			
Graham, J. H	310 13	00 50	353	70			
Harper, C. J	390 20	00 70	323	50			
Keitch, N. M	287 17	50 70	410	70			
Kingston, Paul S	325 27	00 80	305	20			
Kinney, William	525 347		352	80			
Long, A Disbursements	327		872	74			
Porte, Alex. H	320 16	00	348	95			
Price, G. C	307 16	50	336	75			
	10		324	20			
Carried forward			51,447	53	228,4	149	<u>-</u>

Service.	\$ c.	\$ c.	\$ c.
Brought forward		51,447 53	228,449 1
FOREST RESERVE.—Continued.			
Mississaga Reserve.—Concluded.			
Reilly, W. J	310 00 31 30	_ 341:30 %	
Scott, R. R	330 00 23 45	_ 353,45	
Thomas, E. G	332 50 14 70	_ 347 20	
Thompson, Harry	200 00 12 40	212 40	
Warwick, Robert W	322 50 24 10	346 60	
Wilkins, Bert	330 00 18 95		
Nepigon Reserve.		348 95	
\$7,919.71.			
Day, Oswald Disbursements	327 50 36 05	363 55	
Deschamps, D	292 50 2 00	227 50	
Duff, Joseph	325 00 35 70	294 50	
Harvey, Alfred P	317 50 52 90	360 70	
Halliday, W Disbursements	250 00 2 00	370 40	
James, C. H. J	325 00 54 30	252 00	
Leitch, P. A	825 00 1,248 76	379 30	
McGillivray, Roy	287 50 6 60	2,073 76	
McKechnie, W. A Disbursements	150 00 1 50	294 10	
Mutch, D. A	325 00 85 30	151 50	
Disbursements		- 410 30	
Orr, W. A	325 00 45 45	370 45	

Service.	\$	c.	\$	c.	\$
Brought forward			58,945	49	228,449
FOREST RESERVE.—Continued.					
Nepigon Reserve.—Concluded.					
Ritchie, WalterDisbursements		50 50		To a service of the s	
Rolph, Michael		00 50	380	00	
Scott, HarryDisbursements		00 50	316	50	
Servais, Albert Simmons, Roy Skead, Eric Disbursements	147		331 225 225	00	٩
Smith, Rex. Disbursements	328	00	201	25	
Widdifield, Russell Disbursements	277	50	379	30	_
Eastern Reserve.			313	10	
\$1,319.34. Gilmour, John Godkin, Jacob McGregor, Charles Papping, Thomas Disbursements	338		305 332 332 349	50 50	
Sibley Reserve.			200		
Quetico Reserve. \$3,272.40.	• • • • • •	••••	83	34	
Adams, J. M		50 50	310	00	
Armstrong, JohnDisbursements		50 30			
Bury, H. J		50 20	308		
Campbell, J. Stuart		50 50	309 312		
Martin, W. A		00 70	310	00	
Disput sements	·		496	70	

Service.	\$	c.	\$	c.	\$ c.
Brought forward			64,767	52	228,449 1
FOREST RESERVE.—Concluded.					
Quetico Reserve.—Concluded.					
Preston, H. F Disbursements	307 1	50 50	309	00	
Readman, R. Sutton, George. Lichborne, Arthur.			312	50 50	
Wall, George. Disbursements	307	70	308	20	
MINES AND MINING.					65,992 2
Miller, G. W., Provincial Geologist, services Disbursements	$\frac{3,541}{460}$		4,002	59	
Mickle, G. R., Mine Assessor, services	3,333 844		4,178		
Price S. Mining Commissioner, services Dance, R. W., services Disbursements	2,666 592 915	50	1,210		
Corkill, E. T., Inspector of Mines, services	1,666 1,116		4,174		
Knight, C. W., Assistant Geologist, services Disbursements	1,500 392		2,783 1,892		
Coleman, A. P., Geologist & Mineralogist, services.			166		17,197 79
Exploration and Investigation.					
Bartlett, James	$\substack{1,250\\558}$		1 000	00	
Bowen, N. L. Bruce, E. L. Burrows, A. G. Disbursements		33	1,808 367 329	52	
Farrell, Samuel			1,754 161 60	92 00	
Lowry, G. H	745 99		217		
Moore, E. S Disbursements	380 928		844		
Rogers, W. R	692 676		1,309		
<u> </u>			1,368	90	

Service.	\$	c.	\$	c.	\$	c.
Brought forward			8,223	47	311,639	18
Explorations and Investigations.—Concluded						,
Robinson, A. H. A Disbursements	1,666 601		0.000			*
Scott, John	500 289		2,268			
Toyn, John	500 250		789 750			
William, English Canoe Co	500 1 2	25 00 40 00 07				
Special Services and Unforeseen Expenses.			606		12,639	00
MacKenzie, G. C		••••	331 1,061		1,39 3 1,7 5 8	6, 3 *
MINING RECORDERS.						
Belyea, C. W., Recorder	312 143	33 19	4==	50		
Bowker, S. T., Recorder	708 286		455			
Hough, J. A., Recorder	1,000 750 304	00	994			
Lemieux, F. F., Recorder	625 415 156	38	2,054			٠
McArthur, T. A., Recorder	1,000 400 430	00	1,197			
McGuire, H. F	416 126		1,830	00		(
Morgan, J. W Recorder	567 251		542			
Sheppard, H., Recorder	712 678 253	74	819	23		
Carried forward	1,644	23	7,893	91	327,430	03

Service.	\$ c.	\$	c.	\$	c.
Brought forward	1,644 23	7,893	91	327,430	08
MINING RECORDERS.—Concluded.	,				
Blair, F. J., Clerk	294 23 152 88 2,434 04				
Smith, George T., Recorder. McAulay, N. J., Assistant Recorder. Bruce, A. E. D., Clerk. Meagher, T. J. Clerk. Monroe, Eva, Stenographer. Smith, M. H., Stenographer.	1,750 00 1,000 00 1,000 00 650 00 600 00 400 00	4,525	38		
Disbursements Skill, A., Recorder Torrance, T. H., Recorder Knapp, A. E., Clerk Adams, W. G. Clerk.	700 00 300 00 210 00 320 39	5,412	69		
Adams, W. G., Clerk. Gladwell. C. E., Clerk. Disbursements Canadian Express Co. Dominion Express Co.	175 00 1,899 82 45 235 35	3,605	21		
King's Printer	735 68 242 00 1 10	1,214	58	22,651	77
PROVINCIAL ASSAY OFFICE.				,	
Turner, N. L	976 78 521 21	1 407	00		
Rothwell, T. E	833 30 218 35	1,497	99		
Supplies	477 00 227 59 162 57	1,051	65		
, .	100 01	867	16	3,416	80
Cullers' Act. Oliver, J. A., Disbursements Johnson, S. M., Disbursements Currie, D. H., Services McGregor, S. C., Services McDonald, J. H., Services	8 00	11 3 4 4	70 00		
Disbursements Kelley, J., Livery Floyd, W., Rent of tables Town of Fort Frances, Rent of Hall		13 4 5 5	50 00	5 0	e is
Surveys				50 83,357	
Do and on Company				200	
Carried forward			_	437,106	

Appendix No. 6.—Concluded.

Service.	\$ c.	\$ c.	\$ c.
Brought forward			437,106 58
CONTINGENCIES			
Departmental.		,	t
Printing and BindingStationery	2,368 84 4,632 67	7 001 51	
Postage Express	2,148 00 252 02	7,001 51	
Telegraphing Telephone Messages. Telephone Rent. Car fare	452 06 37 20 54 80 70 00	2,400 02	
Subscriptions	199 90 4,600 65	614 06	~
Typewriter, rent and repairs Johnston, H. E., Travelling expenses Kirkpatrick, G. B., Travelling expenses Rorke, L. V., Travelling expenses White, Aubrey, Travelling expenses Whitson, J. F., Travelling expenses	394 00 18 68 6 85 21 90 18 00 124 80	4,800 55	
Extra ClerksSundries		584 23 3,321 64 105 88	10 097 00
BUREAU OF MINES			18,827 89
Printing and Binding	1,811 18 1,957 28	0.700.10	
Postage Telegraphing Express and Cartage Advertising Subscriptions Maps	472 67 260 63 82 82 4,869 44 147 84 668 82	3,768 46	
Baker, M. B., Travelling expenses	17 35 18 96 370 77 12 60	6,502 22	
Typewriter repairs, etc	21 50 7 80	419 68	
Extra Clerks Nicholas, F. J., Preparing index. Sundries	401 00 180 31	29 30 1,480 33	
		581 31	12,781 30
PROVINCIAL MINES. COMMISSIONS RE SUNDRY INVESTIGATIONS. REFUNDS			13,777 72 792 70 14,064 58
			\$497,350 72

D. GEO. ROSS, Accountant.

AUBREY WHITE,
Deputy Minister Lands and Forests.

Appendix No. 7.

Statement of Expenses on account of various services under the direction of the Department of Lands, Forests and Mines, for ten months ending Oct. 31st, 1909.

Service.	\$	c.	\$ c.	\$ c.
Diamond Drill.				
MacVicar, J. A Disbursements	1,200 819	00		
LaborFreight, Express, Etc	1,446 204	24 16	2,019,03	
Supplies	366 825	94	1,650 40	
Drill furnishings		45	1,895 26	5,564 69
ALGONQUIN PARK	 .			9,332 29
RONDEAU PARK				2,515 53
VETERANS' COMMUTATION				8,050 00
				\$25,462 51

D. GEO. ROSS, Accountant.

AUBREY WHITE,
Deputy Minister Lands and Forests.

Appendix No. 8.

WOODS AND FORESTS.

Statement of revenue collected during the 10 months ending October 31st, 1909.

	\$	c.
Amount of Western collections at Department do do do Quebec do Belleville collections do Ottawa collections	791,127 30,666 7,545 56,552	03 78 96 67
	885,892	44

J. A. G. CROZIER, Chief Clerk in Charge. AUBREY WHITE,
Deputy Minister.

Appendix No. 9.

PATENTS BRANCH.

Statement of Patents, etc., issued by the Patents Branch from 1st January to 31st October, 1909.

Crown Lands	76
School do	2
Mining do	28
Public do (late Clergy Reserves)	
Free Grant Lands (A. A.).	10
do (Under Act of 1880)	40
Rainy River Lands (Mining and Crown)	24
Mining Leases	4
Licenses of Occupation	1
Crown Leases.	2
Crown Lands (University)	
Mining do do	
Free Grant, Act of 1901 (Veterans)	64
Temagami Islands	,
Total 2	,57

CHARLES S. JONES.

Chief Clerk.

AUBREY WHITE,

Deputy Minister.

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

	Area covered Saw logs.						Boom and Dimen		
Agencies.	by timber license.	P	ine.	Otl	ner.	P	Pine.		
	Square miles.		Feet B.M.	Pieces.	Feet B.M.	Pieces.	Feet B.M.		
Western Timber District Belleville Timber District	11,649 ³ 919 1	1	320,979,340 9,913,602		43,753,119 1,443,542		*.		
Ottawa Timber District	5,5554	1,613,175	100,677,638	372,704	12,028,069	47,962	5,885,686		
	18,5243	9,240,144	431,570,580	1,604,231	57,224,730	232,680	32,174,198		

General Statement

	Cordwood.		rdwood.		Ly				
Agencies.	Hard.	Soft.	Tan Bark	Railway ties.	Posts.	Telegraph poles.	Stave bolts.	Pulpwood	
à	Cords.	Cords.	Cords.	Pieces.	Cords.	Pieces.	iCords.	Cords.	
Western Timber District Belleville Timber	7,988	11,722	7,689	1,363,542	157	1,852	4,128	59,591	
District			311	337	51	25	4	9	
Ottawa Timber District	2,182	9,325	50	9,474	56	199		12,238	
	10,170	21,047	8,050	1,373,353	264	2,076	4,132	71,838	

J. A. G. CROZIER, Chief Clerk in Charge.

No. 10.

FORESTS.

Rent and Bonus during the 10 months ending 31st October. 1909.

DESCRIPTION OF TIMBER.

sion timb	er.		Square tin	ıber.		T.117			
01	ther.		h, oak and alock.	Pi	ne.	Piles.	Pile	timber.	
Pieces.	Feet B.M.	Pieces.	Cubic feet.	Pieces.	Cubic feet.	Lineal feet.	Pieces.	Feet B. M.	
43,854 498		A 61 B 41 O 1 A 1	1,452 1,213 30 55	5,949	314,068 2,158	3,580	- /	630,707	
9,567	1,174,573	Н	2,338			2,136			
53,919	7,247,217	A 62 B 41 O 1 H .			316,226	5,716	5,961	630,707	

of Timber.-Concluded.

Amounts accrued.

Transfer bonus.	Interest.	Trespass.	Timber dues.	Bonus.	Deposits timber sale of 1909.	Ground rent.	Total.
\$ c 1,653 00	\$ c. 9,492 43	\$ c. 42,587 39	\$ c. 784,486 59	\$ c. 63,179 59	\$ c. 273,525 00	\$ c. 45,418 00	\$ e. 1,220,342 00
112 00	480 52	298 72	11,281 42	191 97	• • • • • • • • • • • • • • • • • • • •	3,966 00	16,330 63
605 00	52 70	510 76	129,577 47	325 73	• • • • • • • • •	19,001 00	150,072 66
2,370 00	10,025 65	43,396 87	925,345 48	63,697 29	273,525 00	68,385 00	1,386,745 29

AUBREY WHITE,
Deputy Minister.

Appendix No. 11.

Statement of the work done in the Military Branch of the Department of Lands, Forests and Mines, during the ten months ending the 31st October, 1909.

Letters received
Letters written
Maps supplied to Veterans Location Certificates issued
Locations made Surrenders
References for Patents issued Letters to Military Settlers and Assignees of Veterans

R. H. BROWNE,

Chief Clerk in Charge.

AUBREY WHITE,

Deputy Minister.

Appendix No. 12. Statement of the number of Letters received and mailed by the Department in 1907, 1908, and 1909 (10 months).

		Letters received.							and
Year,	Sales and Free Grants.	Surveys.	Woods and Forests.	Mines.	Totals.	Names indexed.	Orders-in-Council	Returned letters.	Letters, circulars reports mailed Department.
1907	24,871	13,463	9,218	10,060	57,612	63,120	284	92	66,000
1908	22,478	11,263	9,386	9,183	52,310	58,900	243	84	70,000
1909 (10 months)	19,500	16,016	9,086	8,398	53,000	59,400	178	72	62,800

FRANK YEIGH, Registrar, AUBREY WHITE,
Deputy Minister.

Appendix No. 13.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties and of patents issued under "The Free Grants and Homesteads Act" during the ten months ending 31st October, 1909.

Township.	District or County.	A	gent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Baxter Brunel Cardwell Chaffey Draper Franklin Macaulay Medora Monck Morrison Muskoka McLean Oakley Ridout Ryde Sinclair Stephenson Stisted Watt Wood	Muskoka	J. B. Brown,	Bracebridge	8 4 4 5 1 1 1 6 3 2 4 8 1 1 5 1 1 2 6	1,193 376 668 100 196 149 977 476 195 505 713 145 99 1,023 91 96 177 917	3 2 5 1 2	17 1½ 24½ 22 54	6 4 4 5 1 1 1 6 6 3 1 4 4 7 7 1 1 6 6 2 2 4 4	7 1 4 2 5 4 1 3 4 1 6
Carling Christie Conger Cowper Ferguson Foley Hagerman Harrison Humphrey McConkey McDougall McKellar McKenzie Monteith Shawanaga Wilson	Parry Sound	F. R. Powell,	Parry Sound " " " " " " " " " " " " " " " " " "	8 13 11 2 2 1 2 3 6 5 6 1 	1,400 1,834 1,325 258 305 170 200 300 624 709 1,012 200	4 3 9 7 1 6 7 3 2 1 2 1	48\\\ 144\\ 30\\ 37\\ 76\\ 21\\\\ 502\\ 15\\\\ 161\\\\ 22\\ 5	4 6 2 1 1 2 2 4 2	27 2 15 7 2 5 4 4 4 5 6 2
Chapman Croft Ferrie Gurd Lount Machar Mills Pringle Ryerson Spence Strong 3 L. M.	" " " " " " " " " " " " " " " " " " "	Dr. J. S. Fre	eborn, Magnet- awan. " " " " " " " " " " " "	8 12 2 8 4 4 1 3 14 5	122½ 1,706 294 1,111 174 497201 274 1,941 692	1 2 4	279 	8 8 1 4 1 7 2 4 12 3	$ \begin{array}{c} 7 \\ 4 \\ 1 \\ 7 \\ $

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Bethune Joly	Parry Sound	W. Jenkin, Emsdale	1 6 2	100 1,034 304	 4 2		2 3 2	4
McMurrich Perry Proudfoot	"	" " " "	3 1	465 100			 3 1	2 4 5
Hardy Himsworth Laurier Nipissing Patterson	66 66 66	H. J. Ellis, Powassan	11 8 4 5	598 1,709 994 700 964	1 1 2 11 1	13½ 46½	1 9 6 6	11 6 5
Bonfield Boulter	Nipissing	. "	7	777			1	5
Chisholm Ferris	"		23 23	1,209 2,106	···ż	128	13	6
Anson	Haliburton	R. H. Baker, Minden	8	401 755		1	1 3	i
Lutterworth Minden Snowdon Stanhope	66 66 66	44 44 44 44 44 44	1 4 3 7	51 502 299 753	1 1 1		1 4 2	3 1
Sherborne	" D-411	" "	5	389	4	51 1		3
Burleigh, N.D. " S.D.	"	· · · · · · · · · · · · · · · · · · ·	3 1	414 83		31	2 1	1
Chandos Methuen	44	66 66	1 3	91 300		•••••	1 1	····ż
Cavendish Cardiff Galway Monmouth	Peterboro'	James Wilson, Kinmount	9 6 7	306 1,220 622 822	 2 2	7 40	1 8 2 2	1 2 4 3
Carlow Cashel	Hastings	J. R. Tait, L'Amable	3 3	290½ 267 300.	i	5	1 i	i
Dungannon . Faraday Herschel Limerick	66 66 66	44 44 44 44 44 44	4 7 8	441½ 882½ 920	1 2 1 1	120½ 3	5 5	3
Mayo	66 61 64	11 11 11 11	8				6	9
Wicklow Wollaston	46	46 46	5 3	765 <u>1</u> 385			1 1	
Algona, S Brougham Brudenell	**	Adam Prince, Wilno	2 8	316 1,271	··i	16	<u>4</u>	
Burns Grattan Griffith	66 66 68	44 44 44 44	8 2	970 200½	i	20	2	4 1
Hagarty	"] " " "	6	675			6	

		-		4		purchasers.	sold.		
				persons ted.		ıas	So.		\$
	District			os.	es.	rg.	acres	برا	E
Township.	or	Agent	Je	2.2	ed	ĕ	5	ne ot	ಡ್ಡರ
	County.			at 1	نة ش برخ	of 1	of 8	L in	f 1
•				0.0	0.00			o. of lots resumed.	iss.
				No. of pers located.	No. of acres located.	No.	No.	So.	No. of patents issued.
•	ź.	11 D: W			510				
Jones	Renfrew	Adam Prince ,Wi	Ino	4 5	516 722	· · · · · · · · · · · · · · · · · · ·	42	$\frac{1}{3}$	2
Lyndoch	Ponfrow	11 11		4	410	l i	42	2	2
Matawatchan.		" "		i	104	• • •	• • • • • • •	-	-
Radcliffe	"	"		5	897	3	141	3	i
Raglan	"	" "		6	610	2	64	2	10
Richards	**	11 11	•	4	428				
Sebastopol	"	" "		2	250			2	₂
Sherwood	"	"		17	1,584	2	17	6	7
Algona, N	Renfrew	D. B. Warren, Pe	mbroke	1	97	• • •			
Alice	"	"	**	6	672				1
Buchanan (pt)	11	"	"						1
Fraser	"	".		3	$355\frac{1}{2}$			2	
Head Maria	**	"	"	• • • •	• • • • • • • •	•••	• • • • • • •	• • • •	• • • •
McKay (pt)		**	**	• • • •	• • • • • • • • • • • • • • • • • • • •	• • •		• • • •	• • • •
Petawawa	"	"	**	4	404	i	31		2
Rolph	44	44	**	i	100				3
Wilberforce		"	**	1	100	,		1	
Wylie (pt)	"	64	"						1
					200			١ ـ	
Calvin	Nipissing	James Jenks, Ma	ttawa	2	200			1	2
Cameron (pt).		46	"	2	200		••••	• • • •	• • • •
Lauder Mattawan		**	**	• • • •	,				i
Papineau	"	**	**	9	850	i	11	4	
		D 7 D 0 11	a 11 a			-		-	
Korah Parke	Algoma	B. J. Rothwell,			160	• • •			2
Prince	"	"	" Marie	3	488	2	200	2	
				ı "	400	-	200	"	
Aberdeen add.	44	Thos. Buchanan,	Thessalon.		141				4
Galbraith	" "	"	**	1 18	$ \begin{array}{r} 141 \\ 2,734 \end{array} $	i	61/2	3	9
Lefroy	**	**	44	1	160	1	02	٥	1
Plummer		"	46		100	' i	94		2
" add.	. "	44	46						
St. Joseph Is'd	**	W. E. Whybourne	, Marksville	3	283	1	9	3	6
Merritt	66	R. J. Byers, Mass		35	4,6041	1	793	1	
D 1.1						-		1	
		H. A. Keefer, Por	rt Arthur	2	320			2	1 2
Conmee			**	23	3,814	2	$168\frac{1}{2}$	25	6
Crooks	1		"	17	1 511	• • •			3
Dawson Road. Dorion	"	**	**	17 14	$1,511 \\ 2,109$	3	160	$\begin{vmatrix} 9\\9 \end{vmatrix}$	
Gillies	"	**	"	7	1,0473	3			
Gorham	**	"	**	27	4,578\$	1		17	1
Lybster	**	"	"	8	1.226	2	168	8	6
Marks	"	"	**	14	$2,219\frac{1}{2}$	2	$166\frac{1}{2}$	8	7
McIntyre	"	"	**	7	985			6	
McGregor	1	"	"	14	2,247	5	201	8	
O'Connor Oliver	1	"	"	15 13	$2,400\frac{1}{2}$	2 2	301	13 11	1
Paipoonge, NR		"	**	15	2,080 89	1	100		2
" SR		44	"	2		3	202	2 2	2

Township.	District or County.	Agent	•	No. of persons - located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
	Thunder Bay.	H, A. Keefer, Por	t Arthur, .						,
Pearson	"	"	"	3	$480\frac{1}{2}$	7	$977\frac{1}{2}$	8	4
Scoble		"		9	$1428\frac{1}{2}$	1	3	5	2
Strange	••	••	••	7	962	3	$377\frac{1}{2}$	6	6
Atwood	Painy River	William Campba	11 Stratton						
Blue	Rainy River	William Campbe	n, Stration	7	069	4		8	10
Curran	"	46	**	2	968 324	1	$\begin{array}{c} 88 \\ 1 \end{array}$	3	
Dewart	. "	"	44	3	480	-1	1	5	•
Dilke	"	. "	44	1	80	· · · · · · · · · · · · · · · · · · ·	5	1	4
Morley	"	. "	44	4	484	5	196	4	4
Morson	"	"	"	57	8,5993	4	2051		
McCrosson	"	**	46	14	1,911	7	396	11	5.
Nelles	"	"	"	9	1,232	7	213	8	
Pattullo	"	"	"	7	957	2	36	7	6
Pratt	"	"	"	11	1,7591			9	2
Roseberry	"	**	"						
Shenston	"	"	"	6	. 923	7	178	5	6
Spohn	44	"		30	4,605	3	$121\frac{3}{4}$		3
Sutherland	"	•••	"	11	$1,853\frac{1}{2}$	2	80	7	
Sifton			"	18	$2,841\frac{1}{2}$	6	296	10	
Tait		"	"	5	729	2	121	14	-
Tovell Worthington	- 44	44	"	17	$2,408\frac{1}{4}$	5 2	$360\frac{1}{2}$	14	3
worthing ton					• • • • • • • •	ے ا	82	• • • •	
	Rainy River .	Alex. McFayden,	Emo			2	68		2
Barwick	**	**	"	10	1,651	4	1711	10	8
Burriss Carpenter	**	"	"	10	$647\frac{1}{2}$	1	1712	4	2
Crozier	"	**	"	9	$1,146\frac{3}{4}$		761	8	-
Dance	"	"	"	18	2,783			12	
Devlin	"	"	46	1	41	1	42		6
Dobie \dots	66	"	44	6	9951	4	149	10	7
Fleming	"	46	44	1	154			 	
Kingsford	"	"	44	12	1,896	1	401		4
Lash	"	"	"	6	891	5		4	
Mather	"	",	"	6	$988\frac{1}{2}$			1.6	12
Miscampbell.		"		15	2,434	3	1		
Potts Richardson	16	"	44	24	$3,826\frac{1}{2}$		1 1 79 79 79 1		2
Roddick	. 44		**	$\frac{7}{2}$	236	2		1	2
Woodyatt	46	"	44	1 -	200	l ī			3
mood att in i		1				1 ^			
Aubrey	Rainy River	R. H. Pronger, D	ryden	. 10	1,428	1	12	1	2 4
Eton		"	"	4	$479\frac{1}{2}$			1 2	4
Langton	"	"	"						
Mutrie	"	"	44	6		2	172	4	5 4
Rugby		"	"	1		1		$ \cdots $	4
Sanford	1		**	8		3	83	(1
Temple	·	**	"	5		13	300		
Vanhorne	1	"	44	4 6		2 2			
Wainwright Zealand		66	**	13					6
arcaranu	`			10	1,0102	1	114	1	
Melick	. "	W. L. Spry, Ken	ora	. 36	4,962	7	417	22	3
Pellatt		" "		26		1 ~			5
								1	-
Blezard	1	J. A. Lemieux, S	udbury	. 4	~			4	31
Capreol	.1 "	1	••	36	4,559	6	90	1	31

Appendix No. 13.—Concluded.

Township.	District or County.	Ag	rent.	No. of persons located.	No of acres located.	No. of purchasers.	No. of acres sold.	. e	No. of patents issued.
Hanmer. Balfour Broder. Chapleau Dill. Garson Neelon Rayside.	Algoma	J. K. MacLenn " " " " " " " "	nan, Sudbury " " " "	28 8 14 7 1 5 16 5	$3,841\frac{1}{4}$ $941\frac{1}{2}$ $1,953\frac{1}{2}$ 981 166 $711\frac{1}{4}$ $2,281\frac{1}{2}$ $603\frac{1}{4}$	3 1 2 4 7	89	3 2	13 7 5 1 6 7 6
Appleby	" " Nipissing	E. A. Wright, "" "" "" ""	Warren	16 5 8 13 7 7 4	$2,621$ $842\frac{1}{2}$ $1,148\frac{1}{2}$ $2,089\frac{1}{2}$ $920\frac{3}{4}$ $1,052$ $640\frac{1}{2}$	$\begin{array}{c} 6 \\ 1 \\ \cdots \\ 2 \end{array}$	64 8 29 50½	2	9 2 11 8 7 7 3
Grant Macpherson Martland	Sudbury Nipissing	J. A. Philion, " " " " " "	Sturgeon Falls	. 3 11 7 18 5 6	$\begin{array}{c} 400 \\ 1,761\frac{1}{2} \\ 810\frac{1}{2} \\ 2,776 \\ 805 \\ 659 \end{array}$	1 4 1	2½ 5		13 9 11 7 12
Abinger Clarendon Denbigh	Addington Frontenac Lennox and Addington		Denbigh	2	400 200		1	1	2 2 3
Canonto, S "N Miller (pt.) Palmerston (pt	**	"	"	1	100				
Airy Finlayson Murchison Sabine	Nipissing " " "	Unattached.		$ \begin{array}{c c} & 8 \\ & 1 \\ & 6 \\ \hline & 1418 \end{array} $	1,119 155 882 196,6024	1 329	12,211	705	$ \begin{array}{ c c c c } \hline & 4 \\ & 1 \\ & \ddots \\ \hline & 3 \\ \hline & 804 \\ \hline \end{array} $

W. C. CAIN, Clerk in Charge. AUBREY WHITE,

Deputy Minister.

Appendix No. 14.

Statement of Municipal Surveys for which instructions issued during the 10 months, ending October 31st, 1909.

No.	Name of Surveyor.	No.		of Instruc- tions.	Description of Survey.
[1	Alex. Niven	672	June 1	12, 1909	To survey the lines of the streets in the town of Niagara and to mark the same by suitable monuments in such a manner as the proper lines thereof may at any time be laid down upon the ground.
2	H. T. Routly	673	July 1	14, 1909	To survey part of the town of Haileybury, in the District of Nipissing, as shown on plan M. 13, of the town of Haileybury, and to plant permanent monuments marking the lines of the streets in the town of Haileybury as shown on said Plan M. 13.
3	Thomas H. Dunn.	674	Aug. (3, 1909	To survey the concession line and road between the 10th and 11th concessions of the township of Winchester across lots Nos. 12, 13, 14, 15, 16 and the west half of Lot No. 17, in the 10th concession of the township of Winchester, or as far as may be necessary to find original or undisputed monuments on each side and to plant permanent monuments to mark the said road on each side.
4	Alex Niven	675	Oct. 5	, 1909	To survey the southern boundary of the town of Niagara and to define the same by durable monuments.

GEORGE B. KIRKPATRICK.

Director of Surveys.

AUBREY WHITE, Deputy Minister of Lands and Forests

Appendix No. 15.

Statement of Municipal Surveys confirmed during the 10 months ending October 31st, 1909.

No	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.	Date when confirmed under R.S.O., 1897, Chap. 181, secs. 10– 15 inclusive.
	Herbert J. Bowman .		Aug. 7th, 1907	To survey the original road allowance between the third and fourth concessions of the township of Garafraxa situate between the east, otherwise called the northeast halves of lots 11, 12 and 13, in the 3rd con., and the west, otherwise called the southwest halves of lots 11, 12 and 13, in the 4th con., of the said township, and to have the said road allowance marked by permanent stone or iron boundaries; and if the original monuments cannot be found at the corners of these lots to make the survey between the nearest undisputed points on said road allowance. To survey the boundary road allowance between the townships of McKillop and Grey, from the northeast corner of Lot No. 1, con. 14 of the said township of McKillop westerly to the northwest angle of lot No. 10, con. 14 of the said township of McKillop, and that iron or other durable monuments be planted at the northerly and southerly angles of each original lot along this boundary in each of the townships of McKillop and Grey.	Sept. 3, 1909.

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys in progress during the ten months ending October 31st, 1909.

No.	Date of Instructions.	Name of Surveyor.	Description of survey.	Amou paid	
2 3 4 5	May 18, 1909 . July 29, 1909 . May 20, 1909 . May 27, 1909 .	Speight & Van Nostrand	trict of Kenora Survey of timber berths. District of Thunder Bay Survey of outlines of townships, Temagami Forest Reserve.	\$ 300 13,500 1,600 3,400 5,500	00
7 8 9 10 11 12 13	May 31, 1909 June 1, 1909 May 25, 1909 May 25, 1908 July 21, 1909 July 21, 1909 Oct. 4, 1909 May 20, 1909	Cavana & Watson. T. J. Patten C. H. Fullerton J. W. Fitzgerald. J. H. Burd G. S. Abrey	Survey of Township of Blount, District of Nipissing Survey of Township outlines, Districts of Nipissing and Sudbury Survey of Township outlines, Mississaga Forest Reserve. Survey of Township outlines, Mississaga Forest Reserve. Survey of Township outlines, Mississaga Forest Reserve. Survey of Township outlines, District of Nipissing Survey of Township outlines, District of Sudbury Survey of Township outlines, District of Sudbury Survey of timber berths E., F., I. and J., District of Algoma Survey of timber berths, District of Rainy River Survey of outlines of Townships, Temagami Forest Reserve.	3,500 4,500 5,500 4,500 3,500 3,000 2,500 300 1,640 1,500	00 00 00 00 00 00 00
				54,740	00

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE, Deputy Minister of Lands and Forests

Appendix No. 17.

Statement of Crown Lands surveyed, completed and closed during the ten months ending October 31st, 1909.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of acres.
_					
1	May 28, 1908	T. D. Green	Survey of Township of Umbach,	1 004 65	00.00
2	May 27, 1908	T. Byrne	District of Rainy River Survey of Township of Skead,	1,284 65	29,965
3	Oct. 31, 1908	DeMorest, Stull &	District of Nipissing Survey of burnt territory east of	720 80	23,208
		Low		191 91	
4	Мау 29, 1908	J. Hutcheon	Survey of Township of Sankey,		F1 000
5	Мау 29, 1908	J. Hutcheon	District of Algoma Survey of Township of Fleck,	166 00	51,660
		Speight & Van	District of Algoma	73 50	51,735
Ū	1 00. 1, 1300	Nostrand	Survey of Abitibi Lakes and Is-	2 204 52	
7	June 2, 1909	Edmund Seager	lands, District of Nipissing Survey of outlines of Townships,	3,204 52	
			District of Rainy River Survey of town plot of Gowgan-	800 07	
			da. District of Nipissing	2,234 75	
9	reb. 17, 1909	A. Lougheed	Survey of timber berths A. L. 1 and A. L. 2. District of Thun-		
10	Мау 20, 1909	E. D. Bolton	der Bay Survey of timber berths, District	162 90	
11	Mov 28 1809	I H Burd	of Rainy River Survey of timber berths, District	1,569 76	
			of Thunder Bay	1,695 46	
			Survey of timber berths, District of Rainy River	1,606 09	
13	May 28, 1909	J. J. Lang	Survey of timber berths, District of Rainy River	1,025 14	
14	May 31, 1909	Sutcliffe & Nee-	Survey of Willow River berths,	1,020	
		lands	H.S. 1000, 1002, in the District of Thunder Bay	1,695 45	
15	June 2, 1909	D. Williams	Survey of timber berths, District of Thunder Bay	1,028 32	
16	June 8, 1909	L. V. Rorke	Survey of town plot, Winnipeg River	212 45	
			Survey of Block B, Gowganda.	366 16	
			Strvey of Frederick House town plot	225 08	
19	April 28, 1908	W. Murdoch	Survey of the Township of Morson, District of Rainy River	554 98	
			D. Davidson with O.L.S. W. Murdoch.	100 67	
			E. G. Davis with O.L.S. W. Mur-	1	
			doch	115 00	
			Murdoch	100 00	
		•	Murdoch	214 65	
			W. O. Souch with O.L.S. W. Murdoch	85 0 0	
			H. W. Renwick with O.L.S. W. Murdoch.	118 55	
			Leopold Allin, with O.L.S. W. Murdoch	112 90	
20	Aug. 18, 1909	R. W. Demorest	Survey of timber berths W.D. 7 and W.D. 8.	196 93	

Statement of Crown Lands surveyed, completed and closed during the ten months.—Continued.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of acres.
21	May 19, 1909	L. O. Clarke	Survey of part of Lot 13. Con. 3, Widdifield E. H. Harcourt, printing maps. C. Tarling & Co., mounting maps. The Map Publishing Co., maps J. W. Stone, for canoes for use Surveyors J. A. Oliver, snow shoes, timber berths A.L. 1 and A.L. 2 The Copp Clark Co., Ltd., maps, Morson Rice Lewis & Son, iron posts John Foreman, travelling expenses with E. D. Bolton. Rice Lewis & Son, iron posts G. M. Hendrie Co., maps	13 0 7,254 7 602 0 7 5 80 7 325 0 8 0 25 0 42 4 32 9 154 3 30 0	5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 18.

TOWNSHIP OUTLINES IN THE TEMAGAMI FOREST RESERVE,
DISTRICT OF NIPISSING.

TORONTO, ONTARIO, September 31st, 1909.

SIR,—I have the honour to submit the following report upon the survey of certain township outlines in the Gowganda Mining Division, in the Temagami Forest Reserve, and also the traverse of Gowganda and Obuskong Lakes made by me under instructions from your department, dated the thirty-first of December, nineteen hundred and eight. This survey was commenced in January of the present year, and carried on as rapidly as circumstances would permit, with the result that the traverse work and some thirty-six miles of outlines was completed before the break up in the months of April and May, when work was discontinued, and the remainder of the line finished in July and August.

The base line forming the southern boundary of the townships of Nicol and Milner was run due west astronomically from the iron post planted by me last year six miles due south from the north-east angle of said township of Nicol. Meridian lines were run north from the sixth mile point on this base line forming the western boundary of the townships of Nicol, Haultain and Morel, and from the twelfth mile point forming the western boundary of the townships of Milner and Van Hise. Base lines were also run due west astronomically to intersect the meridian lines as follows:—

From the iron post planted by me last year at the east side of Burk Lake, thus completing the northern boundary of the township of Nicol, and forming the northern boundary of the township of Milner.

From an iron post planted by me last year at the north-west angle of the township of Chown, thus forming the northern boundary of the townships of Haultain and Van Hise.

From an iron post planted by me last year at the east side of Sisseney Lake, on the east branch of the Montreal River, thus completing the northern boundary of the township of Morel.

Good substantial squared wooden posts were planted at every mile throughout the survey, excepting where such point came within a lake or river, in such cases the witness post was planted at the shore with the proper chainage enscribed thereon. The mile posts were all-properly marked with the mileage, numbered from east and south, from 1 M. to 6 M. for each township boundary.

PHYSICAL FEATURES.

In general the surface of the country traversed was rough and rocky.

The water shed between the east and west branch of the Montreal River is only from three to four miles wide.

During the course of the survey great activity prevailed in prospecting for mineral, and several discoveries of silver have been made. The geological features have been investigated closely by the Department of Mines.

TIMBER.

The timber consisted chiefly of spruce, birch, poplar, and jack pine from three to ten inches in diameter.

A considerable area of this country, especially along the water routes, has been burnt over during the years nineteen hundred and eight and nineteen hundred and nine. There are some scattered areas of red and white pine which are generally found around the lakes. The only particular good area of white pine lies along the southern boundary of the township of Nicol, extending from the 4th mile post easterly and northerly to Petipher Lake, also southerly into the township of Charters.

WATERS.

There are several rapids and falls on the east branch of the Montreal River within these townships which might be developed into water power plants of one hundred and fifty horse power or more if occasion should arise. These are located as follows:—

- 1. On the east branch of the Montreal River, in the township of Nicol, south of Inlet Bay on Gowganda Lake, there is a fall of thirty-eight feet in the two rapids. The banks are good and substantial for retaining water. The estimated horse-power, two hundred and fifty in low water.
- 2. On the east branch of the Montreal River, in Gowganda town site reserve, township of Nicol, there is a fall of twenty-seven feet in a rapid which extends from Gowganda to Burk Lake, estimated horse-power, three hundred in low water.
- 3. On the east branch of the Montreal River, at the outlet of Burk Lake, township of Haultain, there is a fall of four feet, and at the outlet of Edith Lake, in the township of Van Hise, there is a fall of eleven feet. These two might be developed as one power, estimated at one hundred and fifty horse-power in low water.
- 4. On the east branch of the Montreal River, at the outlet of Crotch Lake, in the township of Morel, there is a fall of fifteen feet, and length of rapid about ten chains; estimated horse-power, one hundred and fifty.
- 5. On the east branch of the Montreal River, about a mile below number four, in the township of Morel, there is a fall of about fifteen feet; length of rapids, fifteen chains; estimated horse-power, one hundred and fifty.
- 6. On the east branch of the Montreal River, about two miles below number five, at the south end of Tommy Lake, there is a fall of twenty-four feet; length of rapid, six chains; estimated horse-power, three hundred.
- 7. On the east branch of the Montreal River, about a mile below number five, at the north end of Tommy Lake, there is a fall of thirty feet; estimated horse-power, four hundred.

These are the only water powers within the country traversed which I estimate would run over one hundred and fifty horse-power in low water.

Accompanying this report, I submit a plan and field notes, also accounts in triplicate with vouchers.

I have the honour to be,
Sir,
Your obedient servant,
(Signed) L. V. RORKE,
Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 19.

TOWNSHIP OF SKEAD, DISTRICT OF NIPISSING

SAULT STE. MARIE, ONTARIO, March 18th, 1909.

Sir,—I have the honour to submit the following report on the survey of the township of Skead, in the district of Nipissing, performed under instructions from your department, dated May twenty-seventh, nineteen hundred and eight.

As instructed, I commenced the survey at the south-west angle of the township, where I found a one and seven-eighth inch iron post alongside of a wooden post marked on the north-west "Catharine"; west "1"; on the north "Con. 1"; north-east "Skead"; on the east "1"; on the south-east "Bayly"; on the south "Con. VI."; on the south-west "Marter"; on the west "1." From this point I chained north along the west boundary to the line between the third and fourth concessions finding the intermediate posts of wood properly marked. At this point I planted a one and one-quarter inch iron post alongside of the wooden post marked on the north "IV."; on the east "I"; on the south "III"; on the west "12."

I then moved to lot four, in concession one, where I took an observation of polaris and ran side line four and five due north six miles, giving the concessions a uniform width of eighty chains and the lots forty chains each. At the north-west angle an iron post alongside of a wooden post marked on the north-east side "Hearst"; on the east "1"; on the south-east "Skead"; on the south "VI."; on the south-west "Catharine"; on the west "1"; on the north-west "McElroy."

At the intersection of the south boundary with side line six and seven a one and one-quarter inch iron post alongside a wooden post is planted, marked on the north side "Con. 1, Skead"; on the west side "VI."; on the south "Bayly VI."; on the east side "VII."

At the south-east angle of the township a one and seven-eighth inch iron post alongside of a wooden post is planted, marked on the north side "1"; on the north-east "Rattray"; on the south-east "Mulligan"; on the south "VI."; on the south-west "Bayly"; on the north-west "Skead."

At the intersection of concession lines three and four with the east boundary a one and one-quarter inch iron post is planted alongside a wooden post, marked on the north "IV."; on the east "Rattray"; on the south "III."; on the west "XII."

At the northeast corner of the township a one and seven-eighth inch iron post is planted alongside of a wooden post marked on northeast side "McFadden;" on the southeast side "Rattray;" on the south side "VI.;" on the southwest side "Skead;" on the west "XII.;" on the northwest "Hearst."

At the intersection of side line six and seven with the north boundary a one and one-quarter inch iron post is planted alongside of a wooden post marked on the north "Hearst;" on the west "VI.;" on the south "Skead VI.;" on the east "VI."

A one and one-quarter inch iron post alongside a wooden post was also planted at the intersection of side line six and seven with concession line three and four, marked on the west "VII.;" on the south "III.;" on the east "VII.;" on the north "IV."

Frequent observations for azimuths were taken, some of which are noted in the field notes, the variation of the magnetic needle being constant at eight and one half degrees west of the true meridian.

The township is well watered by several small lakes and small streams, the principal being Windigo with its lake expansions. The township is fairly level, soil being mostly clay, with the exception of a small tract of sand at the northwest corner of the township, through which the road to Larder Lake runs.

A rocky ridge runs along the south boundary, also along the east boundary and the eastern part of the north boundary. The shores of all the lakes are rocky but

fully sixty per cent. of the area is fit for agricultural purposes.

The timber is poplar, white birch, spruce, balsam and a few cedar, with jack

pine near the lakes ranging from three to ten inches diameter.

Moose were in great numbers but scarcely any small game. Pike and pickerel are the only fish we found. I found no settlers. General formation Huronic.

As to mining claims, there are a great number of location lines. I only looked after the Nigger Mine as shown on the plan.

I have the honour to be,

Sir.

Your obedient servant,

(Signed) THOMAS BYRNE, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 20.

BASE AND MERIDIAN LINES, DISTRICT OF ALGOMA.

THESSALON, ONT., February 12th, 1909.

SIR,—I have the honour to submit the following report on the survey of base and meridian lines in and adjacent to the Mississaga Forest Reserve, in the district of Algoma, made by me during the past season, under instructions from your department dated twenty seventh of May, nineteen hundred and eight.

I left Thessalon on June eleventh and proceeded to Bisco, by way of Sudbury, where most of my supplies and outfit had previously been shipped. I completed my outfit here and had everything shipped to Wakami Siding, about forty miles west of Bisco, on the Canadian Pacific Railway. From this point a very good canoe route leads to the head waters of the Wenebegon River, a tributary of the Mississaga River. This route was used in proceeding to the starting point of the survey, as it is much easier than the usual route from Bisco, the portages being short and less numerous. I arrived safely at the mouth of the Aubinadong River with my outfit and four months' supplies and proceeded up this river about ten miles. At this point the supplies were cached and I then proceeded with a light outfit to the starting point, at the seventy-eighth mile post on the base line run by Ontario Land Surveyor Niven in nineteen hundred and two, arriving there on the evening of Saturday, June twenty-seventh.

I commenced the survey of the first meridian line at the seventy-eighth mile post on the base line run by Ontario Land Surveyor Niven in nineteen hundred and two and ran due north astronomically a distance of thirty miles, planting a wooden post at the end of every mile marked on the south side with the number of miles distant from the starting point. Iron posts were planted beside the wooden posts at the end of the sixth, twelfth, eighteenth, twenty-fourth and thirtieth miles. These posts were marked the same as the wooden posts, the number of the mile being cut in Roman numerals with a cold chisel.

From the thirtieth mile on the first meridian I ran due east on the second base line a distance of twelve miles, planting wooden posts at every mile, and marking them on the west side. Iron posts were planted at the sixth and twelfth miles and marked similarly to the wooden ones.

I then returned to the thirtieth mile on the first meridian and ran due west astronomically a distance of twenty-three miles, seventy-five chains, seventy-six links, at which point I intersected the meridian line run by Ontario Land Surveyor Speight in eighteen ninety-eight. A wooden post marked on the east side was planted at the end of each mile and at the intersection with Ontario Land Surveyor Speight's meridian. Iron posts were planted at the end of the sixth, twelfth and eighteenth mile and at Ontario Land Surveyor Speight's meridian, the marking being the same as on the wooden posts beside which they were planted. The wooden post at the west end of this line is marked "XXIV M—4.24 ch" on the east side. The iron post, however, is marked "XXIV M," as I had unfortunately lost the cold chisel used for marking the iron posts, the marking was done with a file, and I found it impossible to mark the broken chainage on the iron post. I then marked it with the even mile and noted the fact in the field notes.

On completing this line I returned to the twelfth mile and commenced the survey of the second meridian by running due south astronomically from the twelfth mile post on the second base line. I ran this line due south a distance of twenty-four miles, thirty-four chains, forty-three links, at which point I intersected the production of the north limit of township twenty-two, range ten, which line had been run by Ontario Land Surveyor Cozens in nineteen hundred and seven. I produced this line due east astronomically a distance of seven chains thirty-one links to intersect my second meridian line. Wooden posts marked on the south side were planted at the end of each mile on this line. Iron posts were planted at the end of the sixth, twelfth, eighteenth and twenty-fourth miles and marked on the north side. At the intersection with the easterly production of the north limit of township twenty, range ten, a cedar post was planted marked "XXIV M+34.93 chs." on the north side.

From this point I returned to the eighteenth mile post on the second meridian line and from this point ran due east astronomically on the first base line. I had intended running the western twelve miles of the first base line before running east, but on arriving at the starting point I found that it would be impossible to do this on account of the great difficulty in getting supplies to the line. I, therefore, decided to leave this twelve miles until later, and ran east towards my base of supplies on the Aubinadong River. I ran the portion of the first base line which lies between the first and second meridians from west to east instead of from east to west as instructed. I marked the posts, however, with the distance in miles from the first meridian line on the east side of each post. An iron post

was planted at the end of the sixth mile marked "VI M" on the east side. I intersected the first meridian at a point four chains fifty-nine links south of the twelfth mile post. No iron post was planted here, but a wooden post was planted marked "XII M—4.59 ch." on the south side.

From the first meridian I ran due east astronomically from the twelve mile post a distance of twelve miles, three chains, fifteen links, at which point I intersected the meridian line run by Ontario Land Surveyor Niven in nineteen hundred and two, at a point four chains eighty-one links south of his twelve mile post. Wooden posts marked on the west side were planted at the end of each mile on this line. No post was planted at the end of the twelfth mile but at Ontario Land Surveyor Niven's meridian a post was planted, marked "XII M—3.15 ch." on the west side. Iron posts were planted at the end of the sixth mile and at Ontario Land Surveyor Niven's meridian marked the same as the wooden posts, except that the iron post at Ontario Land Surveyor Niven's meridian is marked "XII M" on account of it being impossible to mark the extra chainage with a file.

On completing this line I decided to return home and went down the Aubinadong and Mississaga Rivers, arriving in Thessalon on the night of October twelfth.

Immediately after New Year's I proceeded to Searchmont on the Algoma Central Railway, where I procured a team and transported my outfit to a lumber camp in township twenty-two, range eleven. From here I proceeded by toboggan to a point near the eighteen mile post on the second meridian line, from which point I ran due west on the first base line a distance of twelve miles, seven chains, thirty-five links to the meridian run by Ontario Land Surveyor Speight in eighteen ninety-eight. I planted a wooden post marked on the east side at the end of each mile with the exception of the twenty-fourth mile. A post was planted, however, at the intersection of Ontario Land Surveyor Speight's meridian which came at twenty-four miles plus seven chains thirty-five links. Iron posts were planted at the eighteenth mile and at the intersection with Ontario Land Surveyor Speight's meridian and marked similarly to the wooden posts at these points.

On all of the above lines where the end of a mile came in a lake a post was planted on the nearest shore and marked and the distance marked on the post

plus or minus as the case might be.

Throughout the survey care was taken to have the lines well cut out and blazed and to have good durable posts well made and firmly planted. Stone mounds were made around the posts whenever possible. Bearing trees were marked B T and the bearing and distance from the posts marked in the field notes.

Observations on Polaris were taken whenever possible, and these are noted in their proper places in the field notes. Great difficulty was experienced during the latter part of the survey in getting observations on account of the unusual amount of smoke in the atmosphere.

TIMBER.

There is a very large amount of valuable timber within the limits of the survey. There are some large burnt areas resulting from fires which apparently swept the country about twelve or fifteen years ago, but taken as a whole the country is largely a virgin forest. On the timber plan which accompanies this report I have shown approximately where these burnt areas are, but on account of the distance between the lines run it is not possible to make any estimate as to their exact extent.

The first meridian for the first four miles runs through a brulé, about forty years old, the timber consisting mostly of poplar and birch up to eight inches

poor.

diameter. From the fourth to the ninth mile the lines run through a forest of spruce, birch, balsam, etc., with white pine scattered throughout. Near the sixth mile the pine is quite thick. From the ninth to the tenth mile there is a brulé with no timber of any value. From the tenth to the sixteenth mile the timber is of good quality, spruce, balsam, and jack pine predominating, although there is a large amount of white pine throughout. There is also considerable birch and maple. From the sixteenth to the twenty-fourth mile the line runs through a brulé of very large extent. This brulé extends as far as can be seen from the hill tops and runs at least five miles to the east, and a considerable distance west, and an immense amount of timber has been destroyed. From the twenty-fourth to the thirtieth mile the timber is mostly green with a couple of smaller areas of brulé, spruce, balsam, birch, etc., being plentiful, with a considerable amount of white pine scattered throughout.

The first base line, east of the first meridian line, this line runs through continuous green timber, spruce, balsam, birch, etc., are the prevailing varieties, and the white pine is of enormous value. On this line white pine of good quality is nearly always to be seen and appears to extend for a long distance both north and south of the line. This is the best timber area encountered during the season. West of the first meridian the line runs through a forest of spruce, birch, balsam, cedar, etc., with considerable white pine throughout as far as the eleventh mile. Here a small area of brulé is crossed and then green timber continues as far as the end of the line. From the eleventh mile west there is not so much pine visible from the line, but more hardwood is seen than on any of the other lines. There is some very good pine between the seventeenth and the twenty-first miles, but from the twenty-first to the twenty-fourth mile the line runs through a series of hardwood ridges. The timber on these ridges is maple and yellow birch, but the quality is

The second base line. East of the first meridian the line runs through a green area with spruce, balsam and jack pine predominating. There is considerable white pine scattered throughout, but the white pine is not so plentiful as on the lines further south. The best white pine occurs between the tenth and twelfth miles. Two areas of brulé are crossed on this line, one starts one and a half miles east of the first meridian and runs east to the third mile. The other commences near the eighth mile post and extends east a mile and a half. There is no timber of value on these areas. West of the first meridian the line runs through spruce, balsam, birch and jack pine, with some scattered white pine as far as a large lake at the second mile. West of this lake an area of brulé is entered, which extends to the seventh mile. From this point as far west as Ontario Land Surveyor Speight's meridian the line runs in green spruce, birch, balsam and jack pine with white pine scattered throughout, with the exception of an area of brulé which is crossed near the nineteenth mile. The white pine is most noticeable west of a small lake at the fifteenth mile and again near the twenty-third mile. as a whole this line runs through more spruce and jack pine and less white pine than the first base line.

Second meridian line. This line runs through green timber throughout its entire length, except for a small area of brulé near the nineteenth mile. From the first to the sixth mile the line runs through spruce, birch and jack pine, with an occasional white pine. From the sixth to the eighteenth miles the white pine increases, in some places being quite plentiful. From the eighteenth mile to the end of the line there are more hardwood ridges with spruce and balsam in the valleys, but not much white pine.

As to the sections of the country lying in between the lines I am unable to say much, but I am convinced that what I saw from the lines is a very fair average of the whole. My packers were continually travelling across country away from the line and what they say confirms me in this belief. They report a very considerable area of white pine between the first and second meridian about opposite the twenty-third mile on the first meridian. They also report splendid pine along the Aubinadong Rivers north of the first base line.

GEOLOGICAL AND PHYSICAL.

The country as a whole is very rough and in some places mountainous, the rocks being mostly granite and gneiss of the Laurentian age. The southern part of the country is the roughest, as the hills and rock ridges are higher, but along the second base line the ground is very much broken, although the hills are not so high. In the northern part of the country there are more gravel and boulder ridges than in the southern part. The Aubinadong River occupies a deep valley with rough rocky cliffs visible in every direction.

There is no agricultural land worth considering. Where the country is not broken with rock or boulder ridges the land is either sandy or stony, and in most of the valleys are the muskegs typical of this part of the country.

There are numerous small lakes, but few of any size. The largest is crossed by the second base line at the second and third mile. This lake extends about five miles to the north and forms the headwaters of the west branch of the Aubinadong river. There are also two or three lakes of two or three miles long on the Goulais River and its branches.

The territory included within the limits of the survey is drained by the waters of the Aubinadong River or west branch of the Mississaga River and its tributaries and by the Goulais River. A comparatively small area in the southern portion is drained by the Garden River, while a small area in the northwest corner goes to Lake Superior by way of the Batchewaung River. These streams, while of considerable size, are all very rough and very difficult to travel on account of the long portages and many rapids. The lakes are mostly small and isolated and there are very few canoe routes that can be used, and the question of transportation is one of very great difficulty. The larger lakes at the head waters of the rivers will be useful for reservoir purposes when the question of driving timber down these streams is considered. I may say, however, that all the streams within the limits of the survey will require very extensive improvements before it will be possible to use them for driving timber. There is one considerable fall on the west branch of the Aubinadong River, near mile nineteen on the first meridian line which would be useful for water power purposes. There are no large water powers, however, on any of these streams, as there is not the volume of water in any of them to make a large power, and the falls, while numerous, are more of the nature of continuous rapids, which would require a large expenditure of money in order to utilize the fall.

- The magnetic variation was fairly constant at an average of three degrees forty minutes west.

FISH AND GAME.

Moose and red deer are in great abundance. Wolves are also very numerous and could be heard howling almost every night. Very few signs of beaver were

seen, and other furbearing animals are not plentiful. Partridge and rabbit have

almost disappeared as very few were seen.

In the streams and lakes at the head waters of the Goulais and the west branch of the Aubinadong Rivers are to be found an abundance of speckled trout of very good size. Gray trout are also found in some of these lakes. The Aubinadong River itself contains pike.

Accompanying this report are field notes and plans of the survey, also my

account in triplicate.

I have the honour to be, Sir,

Your obedient servant,

(Signed) James S. Dobie,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 21.

TOWNSHIP OF SANKEY, DISTRICT OF ALGOMA.

GUELPH, ONT., January 26th, 1909.

SIR,—I have the honour to submit the following report on the survey of the township of Sankey, in the district of Algoma, made in accordance with instructions from your department dated May twenty-ninth, nineteen hundred and eight.

This township lies north of the township of Eilber surveyed by me in nineteen hundred and seven and is traversed from south to north by the Missanabie River which enters it between lots twenty-six and twenty-seven, concession one, and leaves it by two branches separated by Skunk Island between lots eighteen and twenty, concession twelve.

The river has an average width of about ten chains, but as a rule is not of great depth and in many places the channel is strewn with boulders. It is also broken by a number of rapids, the principal ones being "Black Feather Rapids," in lot twenty-six, concession three, and "Kettle Rapids," in lots twenty and twenty-one, concessions seven and eight, the former having a length of twelve hundred feet and a descent of about twelve feet, in the latter the fall is also about twelve feet. Between these two rapids there are several small rapids which makes canoeing in this part of the river somewhat difficult.

The south and west boundaries of the township were run by Ontario Land Surveyor Speight in nineteen hundred and six and the north boundary by him in nineteen hundred and seven. The east boundary was run by me at the time of making the subdivision.

The township is nine miles square and was surveyed under the new system approved by Order in Council, April twenty-fourth, nineteen hundred and six.

As required under this system a road allowance fifty links wide has been left on each side of the outlines and a road allowance one chain wide between alternate concessions and a side road allowance of the same width between lots six and seven, twelve and thirteen, eighteen and nineteen and twenty-four and twenty-five across the township. The concession lines were run due east and west and the side lines due north and south.

The survey lines were run in the centres of the road allowances. The lots are marked on the ground by wooden posts planted at the front angles along the concession lines, the frontage width of the lots being twenty-five chains and twenty-five links and the depth of the lots fifty-nine chains and fifty links or as near those dimensions as possible.

At each lot line three posts were planted, one being planted on the survey line, one on the south side of the road allowance and one on the north side. The centre post was marked with the numbers of the lots on the east and west sides and with the letter "R" on the north and south sides. The posts on the sides of the road allowance were marked with the lot numbers on the east and west sides and with the number of the concession on the south or north side, according to the position of the post, and with the letter "R" on the side facing the road allowance.

At side roads a post marked "R" on four sides was planted at the intersection of the survey lines and a post on each of the four lot corners and marked with the number of the lot and concession.

On the township boundaries posts were planted on the centre line and on the side of the road allowance within the township.

An iron post one and one-quarter inches in diameter was placed beside the wooden post in the centre of the road allowance at each of the following points:—On the south boundary between lots twelve and thirteen, on the line between concessions six and seven at the east boundary and at the line between lots twelve and thirteen and at the west boundary, and on the north boundary at the line between lots twelve and thirteen. These posts were marked "R" on four sides and with the numbers of the adjacent lots on the east and west sides and the concession numbers on the north and south sides. The one and seven-eighth inch iron posts at the corners of the township are marked "Sankey" on the side facing the township.

The surface of this township is undulating and is well drained by the Missanabie River and the creeks flowing into it.

The soil is mostly clay or clay loam, but to the east of the river there are a few sandy hills. In the swamps the clay is overlaid with from one to two feet of black muck covered with a thick growth of moss.

About one-third of the township had been burnt over a number of years ago. This burnt land is chiefly in the northeast corner of the township. On the low land the dead trees are still standing, but where the land is dry much of the timber has fallen and in a few places the land has been burnt almost clean. A young growth of spruce and poplar is springing up.

In the remainder of the township the timber is chiefly spruce, mixed in places with poplar, balsam, tamarac and white birch. The diameter of the trees in some localities runs up to about eighteen inches, but much of the timber is of young growth and is about six or eight inches in diameter.

A few rock exposures and some pieces of stony ground were seen, but these were not of large area, and as a whole this will be a fairly good agricultural township with only a small percentage of waste land.

Accompanying this report are the field notes of the survey, a map of the township and a timber plan.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) James Hutcheon.

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 22.

TOWNSHIP OF FLECK, DISTRICT OF ALGOMA.

GUELPH, ONT., December 30th, 1908.

SIR,—I have the honour to submit the following report on the survey of the township of Fleck in the District of Algoma, made in accordance with instructions from your Department dated the 29th day of May, 1908.

This township lies east of the township of Sankey and north of McCowan, and is reached by way of the Missanabie River canoe route from Missanabie Station on the Canadian Pacific Railway and portaging eastward through the township of Sankey.

. This township is nine miles square and is sub-divided under the system approved by Order in Council dated April 26th, 1906.

The south boundary of the township was run by Ontario Land Surveyor Speight in 1906. The east, west and north boundaries were run by me this year. The west boundary was run due north from the post planted by Ontario Land Surveyor Speight on his base line to mark the intersection of the boundary between the townships of Eilber and McCowan, to intersect the base line run by Ontario Land Surveyor Speight in 1907 as the north boundary of the township of Sankey, which it intersected at a distance of three chains and ten links west of his nine mile post.

The north boundary was run eastward as the chord of a parallel of latitude from this point of intersection and the east boundary was run due north from Ontario Land Surveyor Speight's post at the northeast corner of the township of McCowan to intersect this north boundary.

As required under this system of survey a road allowance of fifty links has been left on each side of the outlines and a road allowance of one chain in width between concessions two and three, four and five, six and seven, eight and nine, ten and eleven, and also a road allowance of the same width between lots six and seven, twelve and thirteen, eighteen and nineteen and twenty-four and twenty-five across the township.

The side lines were run due north and south and the concession lines due east and west, the line of survey in each case being in the centre of the road allowance.

On the concession lines posts of the most durable wood obtainable were planted to mark the corners of the lots, a post being planted in each case on the line of survey and marked with the lot numbers on the east and west sides, and with the letter "R" on the north and south sides.

The posts at the lot corners were planted fifty links north and south of these posts and were marked with the numbers of the lots on the east and west sides, and with the numbers of the concession to which they refer on the north and south side, and with the letter "R" on the side next to the road allowance.

At the side roads a post was planted at the intersection of the survey lines marked "R" on each of its four sides and a post was also planted on each of the lot corners and was marked with the number of the lot on the east or west side and the number of the concession on the north or south side, according to the corner on which it was placed, and with the letter "R" on the two remaining sides.

The iron posts planted at the southeast and southwest corners of the township were marked "Fleck" on the side facing the township. An iron post one and three-quarters inches in diameter was planted beside the wooden post at the northwest corner of the township and marked "Fleck" on the southeast side and "Sankey" on the southwest side.

An iron post one and three-quarter inches in diameter was also planted beside the wooden post at the northeast corner of the township and marked "Fleck" on the southwest side. Iron posts one and one-quarter inches in diameter were planted beside the wooden posts at the following points:—On the centre line of the south boundary at the intersection with the centre of the side road between lots twelve and thirteen; on the centre line of the road between concessions six and seven at its intersection with the line on the east boundary, and at its intersection with the centre line of the side road between lots twelve and thirteen, and at its intersection with the centre line of the west boundary. Also at the intersection of the centre line between lots twelve and thirteen with the centre line on the north boundary. These posts were marked "R" on four sides, with the number of the concession on the north or south sides, and the lot numbers on the east and west.

The surface of this township is comparatively level excepting in the southeast and northeast corners, where the land is rolling and broken by a few rocky hills.

An area of about ten thousand acres in the northwestern part of the township had been burnt over some years ago, and in the northeast corner some six thousand acres had also been burnt.

Where the land is low the timber in these burnt areas is still standing, but on the dry land it is mostly fallen and a young growth of poplar and spruce is springing up.

The central and southern portions of the township are timbered with spruce and poplar with some white birch, tamarac and balsam.

There is scattered throughout the township a considerable amount of good timber of fair size, the best being in the southeast corner, but in many places the trees are of young growth.

The soil is chiefly clay and in the swamps the clay is overlaid with a foot or more of black muck and a thick growth of moss.

In the northeast corner there is some light sandy land.

The principal stream in the township is a creek which enters at lot twenty on the south boundary and flowing north leaves the township at lot nineteen. This

stream is upwards of a chain in width but for the greater part of the distance flows with a very slow current.

There is not much game in the township, a few moose were seen but no red

deer. Traces of beaver were found in the remote parts.

Accompanying this report are the field notes of the survey, a map of the township and a timber plan, all of which I trust will be found satisfactory.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) JAMES HUTCHEON,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 23.

TOWNSHIP OF MORSON, DISTRICT OF RAINY RIVER.

BOWMANVILLE, ONT., February 9th, 1909.

Sir,—I have the honour to submit my report on the township of Morson survey.

In many parts are tracts of good farming land, particularly in the south and northwest portions, with stretches of sandy beach bordering the shore, suitable for summer resorts which the township plan will more particularly indicate.

To develop this township a good waggon road should be constructed from Bergland post office through the township of McCrosson and Tovell to a point near the mouth of the Big Grassy River in Morson and about the entrance to Lake Eleanor.

At this point Mr. Niverson, representing sixty families from Minnesota and John Everett, an explorer from Rainy River, visited my camp and informed me that they had selected the land they wished to settle on near Lake Eleanor.

December twentieth, nineteen hundred and eight, a carload of provisions, implements and three span of horses came to Rainy River, and shortly afterward the same settlers returned to Red River for three carloads more, preparing to occupy lands indicated. John Everett confidently predicts that every foot of farming land in the township will be taken up within a year. These intending settlers are Norwegians, Danes, and Swedes, and they are most anxious to ascertain when they can file at the Land Office for their homesteads.

The Scandinavian Publishing Company of Winnipeg, wrote me inquiring when the township of Morson would be surveyed, as their people desire to take up land there, and I replied on receipt of letter.

The settlers or squatters now in the township who have made improvements are Danes, Norwegians, French and one Englishman (Oscar Langlais) on lot seventeen in the first concession. He has twenty acres cleared with a comfortable home, outhouses and garden, and has continuously occupied this location for the

past eight years and is a splendid producer. My men and myself observed in the garden and ate as fine potatoes, onions, tomatoes, corn and carrots as could be grown anywhere, musk and watermelons, and smoked tobacco cultivated on his location.

All cleared lands not under the plough are covered with wild strawberry vines, wild vetches, and in places wild plum trees. The natural growth of the forest is prodigious in poplar, spruce, tamarac, jack pine, Norway pine and cedar, and in a few places some good white pine, all of which timber is being rapidly taken off the ground by the lumbermen. The soil consists of a white clay loam covered with vegetable mould and producing the thickest growth underbrush, hazel, etc., possible to exist outside of the tropics.

Wishing to inform the Department that Mr. Oscar Langlais said a lumberman had taken the iron post previously planted at the southwest corner of Morson and the iron post planted by me has also been taken, the first being used for a sleigh stake, and it is more than likely that the last one has been removed by

the same teamster.

On my way home from Bergland over the Colonization Road, may say, it is almost valueless as a summer road, although cut out and corduroyed in the centre, it requires side ditching and the material taken out and placed on the corduroy sufficiently high to raise it above the low land which it is built through, as in many places it is only fit for pedestrians, and even they are compelled to wade knee deep in low wet swamp and it is impassable for horses or waggons in summer.

My conclusions are that the land suitable for farming in this township situated on the Lake of the Woods is most congenial to the habits of the settlers now there and those coming, they are an industrious and plodding people with money, stock and farm implements, who will make good subjects and understand thoroughly mixed farming, thereby making a valuable class for the advancement and development of this section of the country.

Good peat bogs exist in the southeast portion and the general formation is

Laurentian rock carrying in places iron pyrites but valueless.

The most important question for consideration is the height of water in the Lake of the Woods, which evolved friction between Canada and the United States in eighteen hundred and eighty-nine, owing to an overflow of said water in Minnesota, and stopping Ross, Hall & Brown's mill in Kenora. This matter was called to the attention of the Dominion Government, who instructed me to locate a suitable point on the Winnipeg River for the erection of a dam to regulate the height of water in the Lake of the Woods to its normal condition and remove all obstructions to that end, etc.

The high water has transformed the Big Grassy River into a navigable stream for steamers, thereby increasing it to three-quarters of a mile in places, making islands which were formerly part of the main land during normal level and submerging land suitable for farming, grazing and hay crops.

A sunken dam existed and now exists which is the main cause for such conditions. When the Keewatin Power Company and lumbermen became aware of the intentions of the Dominion Government they purchased the site chosen for the dam and obtained copies of the plans prepared by me and erected the dam, ostensibly for power purposes and to regulate the waters in the Lake of the Woods. The high water continues, although commissioners from the United States Government have visited the new power dam and returned evidently satisfied that no obstruction existed, thus the water is kept at an abnormal level and in the spring is two feet and a half higher, causing the submergence of the hay meadows border-

ing on the Lake of the Woods, and low lands in Morson and at the mouth of the Rainy River, causing continual changes in the vessel channel between Kenora and Rainy River by causing Sable Island (commonly known as the Sand Banks) to be washed away by new currents and filling up the main channel at its mouth. This can be overcome only by building from properly designed plans, cribwork where the channel requires dredging, lowering the waters in the Lake of the Woods four feet, removing the sunken dam and compelling the Keewatin Power Company to keep it at its normal level.

The iron posts in the township of Morson, district of Rainy River, have placed them according to instructions, dated the twenty-eighth day of April, nineteen hundred and eight, as follows:—

At the south-west angle of the township of Morson, at the interesection of the forty-ninth parallel of latitude, with the shore of the Lake of the Woods, I have marked with a cold chisel "Morson" on the north-east side, "Con. 1" on the north side, and "number 17" on the east side.

On the post on the south-east angle of the township of Morson, I have marked with a cold chisel "Morson" on the north-west side, "Con. 1" on the north side and "1" on the west side.

Alongside of the wooden post on the east boundary, where it intersects the shore of Lake of the Woods, I have planted an iron tube, and marked this with a cold chisel "Con. IX." on the south side, "Lot 1" on the west side and "Morson."

I have the honour to be, Sir,

Your obedient servant,
(Signed) William Murdoch,
Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 24.

TOWNSHIP OF UMBACH, DISTRICT OF RAINY RIVER.

PRESCOTT, ONTARIO, April 20th, 1909.

SIR,—I have the honour to submit the following report on the survey of the township of Umbach, situated some fifteen miles north-west of Kenora. My instructions were dated the twenty-eighth of May, nineteen hundred and eight, and I received them a few days later, and on the following twenty-fifth of June, I visited the neighbourhood and found the country so wet that I decided to postpone the said survey until later in the season. I returned to Kenora the latter part of October, and I had all my provisions transported by water and cached before the river and lakes were frozen. Active operations were begun at the south-west corner of the township on Monday, the second of November last, and an observation having been previously taken on the eastern elongation of polaris, the meridian line

was started north and one mile run. This meridian line forming the west boundary of the township was first run and the concession lines were turned therefrom and run eastward.

On account of all the concession lines having been run eastward it was thought advisable and proper to make the even numbered lots the exact forty chains, and any deficiency or surplus thrown into the odd numbered lots.

The concession line between concessions one and two was used as the base line

from which to turn the angles for the sides lines running north and south.

All the traverse work was done on the ice and no triangulations made excepting the first few days at the beginning of the work.

Iron Posts.

An iron tube post, one and seven-eighth inches in diameter, was planted by me at the north-west angle of the township and marked "lot XVI." on the east side, "Umbach" on the south-east side and "Con. VI." on the south side, and also at the north-east angle of township, or more particularly where the north boundary of the township intersects the waters of Winnipeg River immediately west of Indian Reserve No. 38 C., and was marked lot "1" on the west side, "Umbach" on the south-west side and "Con. VI." on the south side. Also the one found at the south-west corner of the township was marked by me "Con. I" on the north side, "Umbach on the north-east side and "lot XVI." on the east side.

Smaller iron posts one and one-quarter inches in diameter were planted:—

- 1. At the south boundary of the township on the line between lots six and seven and marked "lot VI." on the east side, "Lot VII." on the west side, and "Con. 1" on the north side.
- 2. At the intersection of the lines between lots six and seven and concessions three and four and marked "lot III." on the east side, "lot IV." on the west side, "Con. III." on the south side and "Con. IV." on the north side.
- 3. At the north boundary of the township between lots six and seven, and marked "lot III." on the east side, "lot IV." on the west side, and "Con. VI." on the south side.

At the west boundary of the township between concessions three and four, and marked "lot XVI." on the east side, "Con. III." on the south side, and "Con. IV." on the north side.

5. At the eastern extremity of said line between concessions three and four and marked "lot 1" on the west side, "Con. III." on the east side, and "Con. IV." on the north side.

Thus for the permanency of the survey five small and two large iron tube posts were planted in addition to the one found and marked, at the south-west corner of township, which post also marks the north-west corner of the township of Pellatt.

This township is very rocky, broken and hilly, with numerous lakes and small streams of good water.

There are a few sections of good agricultural land along the south and west boundaries, and already there are a number of lots taken.

ISLANDS.

The islands are all rough and rocky, covered with spruce and balsam, and are useless for anything excepting the timber that is on them, and even that has been all cut off south and east of "the narrows" in lot three, concession four.

1909

Camp Island is the only island that has considerable good soil on it, moreover, the timber is still good and is mostly flat. No mineral bearing rocks were observed.

MAGNETIC VARIATION.

At the south-west corner of the township the magnetic declination was eight degrees fifty minutes east, and near the north-east corner it was eight degrees twenty minutes east.

Thus the mean is eight degrees thirty-five minutes east.

TIMBER.

As regards the timber on this township, I may say that it consists principally of jack pine four inches to ten inches, and spruce three inches to eight inches, together with balsam and poplar four inches to twelve inches. Owing to the proximity of this township to the mills of Kenora and Keewatin, and the convenience of water transportation, most of the merchantable timber has been cut, but there are still some small sections remaining, but are somewhat difficult of access and separated by distances. Fire has destroyed nearly all the timber in the northwestern portion of the township, and only in small clumps is any to be found. On the north and west boundaries solid hubs with tacks were used and left to mark the lines.

Sir,
Your obedient servant,
(Signed) T. D. Green,
Ontario Land Surveyor.

I have the honour to be,

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

A'ppendix No. 25.

REPORT OF THE SURVEY OF UPPER AND LOWER ABITIBI LAKES, IN THE DISTRICT OF NIPISSING.

TORONTO, 15th June, 1909.

SIR,—We have the honour to submit the following report on the survey of the shore lines of Upper and Lower Abitibi Lakes, and the islands therein, within the Province of Ontario, in accordance with instructions from your Department, dated 1st February, 1908:

The work was divided into two parts, the surveys in Lower Abitibi Lake being made in the early part of 1908 and those in the Upper Lake in the early part of 1909.

Preparations for the work were made upon the receipt of the instructions and we proceeded on 17th February, by rail to McDougall's Chute—since called Matheson—and thence by freight teams over a fair winter road about 25 miles in length, to the south-west part of Lower Abitibi Lake.

The survey of the Lower Lake was commenced at Long Point Portage and continued around the lower end of the lake, closing eventually at the same point, the traverse of those parts of the shore forming the boundaries of townships already laid out, being omitted according to instructions. By this time—3rd April, 1908—indications of an early breaking up of the winter were apparent and in order to avoid the increased expenditure which broken weather would entail, the work was discontinued until the following winter.

On 14th January, 1909, we again set out for Lake Abitibi and resumed the work by connecting with the previous survey at the Narrows. The Upper Lake and its islands were traversed in a similar manner, the north shore being followed eastward to the inter-provincial boundary, and the south shore from that boundary westward to the west end of the Upper Lake and thence northward to the Narrows, which was reached on 23rd March. All previously established survey points and lines which could be found were connected with our traverse survey, as were also such mining claims and discoveries—both on mainland and islands—as could be seen. In many instances the writing on discovery posts and trees was obliterated or illegible and therefore could not be noted.

When traversing the shores of the lakes, trees were marked at prominent points along the shores at intervals of one mile or thereabouts, the description and position of these trees being indicated upon the accompanying plans and field notes. Trees for such purposes were selected for their durability and prominence. Along the south shore of the Upper Lake the intervals between the trees marked were shortened to one-half mile or thereabouts, in order to facilitate future connections there within that rugged and broken tract. All trees so marked are numbered 1A. 2A, etc. Iron posts (tubes) 1% inches in diameter were planted at points 12A and 39A. The last named point was previously established by O.L.S. T. B. Speight's micrometer survey in 1900. A large wooden post surrounded by a substantial cairn, was planted at 124A on the north-west part of Lightning Point, in the Upper Lake survey, for lack of the iron post which had been abstracted from our cache sometime during the interim between surveys. The survey was also connected with the flag pole at the Hudson's Bay Company's Post, on the Quebec part of the Lake, the iron post planted on the micrometer survey of 1900 not being found.

All islands were located and those of sufficient size to require it were traversed. Such islands as had already been surveyed and their records filed as mining claims, were given their recorded designations and all others were numbered consecutively from No. 1 with the affix "SV" in accordance with instructions. The islands previously surveyed were confined to the Lower Lake as no surveyed islands were found in the Upper Lake. Where possible the designations of islands were marked on trees thereon, and in the cases of the larger islands a number of trees were marked at prominent points. These trees were selected also for their durability and prominence, the description and position of each being shown on the plans and field notes.

Owing to the extremely low water in these lakes during the winter season as compared with the summer, it is probable that a number of the smaller islands of the Lower Lake will not be visible at ordinary or high water, but it was thought advisable to locate them so that in the event of the discovery of valuable mineral a further survey would be unnecessary. A further reason is that the location of hidden rocks and reefs is of service for navigation. The noting and numbering of these rocks and reefs applies more particularly to the Lower Lake, as in the survey of the Upper Lake only such islands as were of sufficient elevation to admit of

vegetation were given numbers, and those which at ordinary high water level are water-washed, are shewn as "rock" or "reef" and were not given numbers.

Detailed descriptions and areas of all numbered islands are given in the field notes. The depth of snow prevented our gaining any considerable amount of

information regarding the soil and geological features.

About 250 islands were found and classed as such in the Lower Lake, and these varied in size from a few square yards up to 943 acres in extent, the largest being that at the outlet of the "Narrows," the survey of which involved about 13 miles of traverse line. Of these islands only 229 were given new numbers, the remainder being included by recorded mining claims.

In the Upper Lake 488 islands were noted and numbered, besides which a considerable number of rocks and reefs were noted, but not numbered. This number is, of course, exclusive of the islands lying to the east of the interprovincial

boundary.

GENERAL FEATURES.

The country in the vicinity of the Lower Lake is mainly the clay soil of that region with, in places, outcroppings of rock and occasional tracts of sandy soil,

noticeably at Long Point.

On the Upper Lake the conditions are similar, except along the south shore which is rugged and rocky, due to a range of mountains inshore running in a general east and west direction. A considerable amount of rock was noticed on the islands, which present an appearance similar to those of the Muskoka Lakes, but are less rugged.

TIMBER.

The timber is, as a rule, not large, and embraces spruce, poplar, white birch, Balm of Gilead, red pine, tamarac, Banksian pine, cedar and ash, in about the above order as regards predominance. On Long Point there is a considerable quantity of merchantable red pine, and on the south shore of the Lower Lake and near its outlet there is a fair quantity of spruce, poplar and red pine. A well-equipped saw-mill was in operation near the mouth of the Abitibi River, and its output was in demand for the construction of steamboats and barges for local navigation, as well as the requirements of railway contractors, settlers and residents in the vicinity.

WATER.

From our previous knowledge of these lakes we are able to report that their general shallowness will always render navigation somewhat precarious, and thus tend to reduce their desirability as a summer resort. In summer the general clay character of the surrounding country imparts a very muddy appearance, but this is not so noticeable in winter. The small lake on the "Long Point" portage, being in a sandy tract, has deliciously clear cold water at all times.

Low Bush River, with its tributary Circle River, Dokis River, Forks River and Aylen River, are the only streams of note emptying into the Lower Lake. Flowing into the Upper Lake are Ghost, Lightning and Mattawasagi Rivers from the south, and Swampy, Rabbit, Gooseberry, Okikodasik and Saugeen from the north.

MINERALS.

A considerable amount of prospecting for gold has been done on the mainland and islands of the Lower Lake and development work has been done at, at least, two points Moshier's Island and South Bay, each having a well-equipped mining camp.

In the Upper Lake we saw many discoveries marked on the islands, and development work had been done at one point on the south shore, about 1 mile east of the Lightning Point portage, with what results we were unable to learn.

SETTLEMENT.

Apart from the abandoned Hudson's Bay Company's post at the "Narrows," "Biedermans," an Indian home on McDougall's point, and another at Ghost River, the saw-mill at Abitibi River, and a few scattered huts erected by Indians and hunters, there cannot be said to be any actual attempt at settlement in the Ontaric part of Abitibi. Settlers have, however, located for a considerable distance along the road from Matheson.

ACCESSIBILITY.

The old time route from Mattawa, via the Upper Ottawa waters, is now mainly superceded in winter by the Temiskaming and Northern Ontario Railway to Matheson, and thence by team road to the outlet of the Lower Lake, and in summer by navigation via the Black and Abitibi Rivers for Matheson, the two main breaks-at Twin Falls and Couchiching Falls, respectively-having been tramwayed by the railway contractors. When the National Transcontinental Railway has been completed, access to the Lower Lake will be had, with only short connecting roads, both at North-west Bay and North-east Bay, and the Upper Lake will be similarly served via Okikodasik Bay in Ontario, and Whitefish Bay in Quebec. The Lake itself is, however, unfavourable for navigation in summer, owing to its great expanse and unusual shallowness, instances of travellers being windbound for days being numerous. Winter travel on the ice with horses is rendered extremely difficult by the ever present "slush." Efforts have been made to overcome this by using snow ploughs, but with indifferent success. The ploughed tracts fill with the constantly drifting snow, in a short time elevating the roadway so that the sleighs cannot be kept upon it.

GENERAL REMARKS.

The advent of the Temiskaming and Northern Ontario and, in the near future, the National Transcontinental Railway, will do much to promote the development of the agricultural and mineral resources of the Abitibi country, and it will, in our opinion, soon be a large item in the assets of the Province.

Accompanying this report are:

LOWER LAKE:

- (a) A plan on mounted paper in 12 sections, scale 20 chains to an inch.
- (b) An index plan on mounted paper, scale 80 chains.
- (c) A tracing of the first named—in two sheets—shewing the traverse lines, with bearings and distances, also reference trees, etc.
 - (d) Field notes with full details of all islands and shore line surveyed.

UPPER LAKE:

- (e) A plan on mounted paper in 8 sections, scale 20 chains to an inch.
- (f) An index plan on mounted paper, scale 60 chains to an inch.
- (g) Field notes with full details of all islands and shore line surveyed.

We have the honour to be,

Sir,

Your obedient servants,
(Sgd.) Speight & Vannostrand,
Ontario Land Surveyors.

ALGONQUIN PARK.

Appendix No. 26.

ALGONQUIN PARK P.O., December 31st, 1909.

To the Honourable, The Minister of Lands, Forests and Mines.

Honourable Sir,—I beg to hand you my tenth annual report on the Algonquin National Park of Ontario, being for the year 1909.

The Park staff during the past year has been composed of fifteen rangers and the superintendent. Their work has largely been patrolling the park to see that no illegal trapping was going on. This, during the open season, is largely done by canoe, during the winter months on snowshoes. My men travel two together, and each two men have a certain section allotted to them. In addition to patrolling this section, they keep the numerous portages between the lakes cut out and improved, as they also do as far as possible the streams. The size or area of the sections is determined by the ease with which they can be travelled, hence those with long stretches of good canoeing and free portages are larger than those that have less water and require more travelling on foot. My men also make several bark canoes, sleds, etc., for use on their sections, and put in ice and cut the necessary wood at headquarters, besides making required improvements there.

Each season some new shelter houses are built. For this purpose, four rangers work together. The shelter houses erected are good substantial buildings of sided or hewn logs. They have good roofs, windows, etc., and are fitted with a cooking stove, table and benches. Of these, five have been built during the past year. During the summer months the first and most important duty of my men is to prevent fire, and so well has this part of the work been performed, that I am glad to report, we had no bad fires, though several were started, mostly by locomotives on the line of railway. They were speedily gotten under control.

There has been a marked improvement at headquarters during the past year. The Grand Trunk Railway have built a very pretty station and creeted a fine hotel. They have also erected a water tank, the largest on their system, and from this water is supplied to our headquarters. The Department having furnished us with hose, we have now good fire protection for the buildings.

- Wild celery has been planted and sown in several of our lakes and streams with a view to encourage wild ducks to remain with us. Of these we have a great

many, but owing to the scarcity of feed not as many as we would have had we rice beds and wild celery.

Game of all kinds has increased very perceptibly, especially beaver and otter. Of the latter, last week the agent of one of our lumber firms reported seeing eighteen in one day's travel, while the beaver are to be found in large healthy colonies wherever there is even a drain or ditch; they have in fact become so numerous that in a year or two, should the Government so decide, the Park could easily be made self-supporting, as the annual increase of beaver now must be very large indeed. Of course, they do not confine themselves to the Park, but are to be found in large numbers in the adjoining townships, where a few years ago none were seen. Deer have also increased to a marked extent, and are very tame, so much so that they can be seen in numbers by visitors to the Park. They, too, spread out on all sides and keep the surrounding country well stocked.

Wolves, notwithstanding the fact that we kill a great number each year, continue to destroy the deer. Last season our men brought in thirty-five, a large percentage of which were females. No doubt many were also killed that were not found. Owing to the ease with which they can procure deer, we find it difficult to get them to take poison.

We have made some arrests during the past year, but I am glad to report that each year there is less trapping. This I attribute to three causes; first, the thorough work of our men; secondly, the increased co-operation of the limit holders; and, thirdly, the growing feeling in favour of the Algonquin National Park. People are beginning to see results, and trappers are finding that the game outside is being kept up by the supply from the Park.

We have had a great many visitors to the Park during the past year, and some very fine fish were taken, especially some large small-mouthed black bass. These were introduced some years ago and have certainly been a great success.

Several of the capercailzie introduced some years ago from Norway were seen during the past year, and one good photograph secured, showing beyond doubt that they are going to succeed. They are very shy birds and, therefore, are not seen frequently.

Partridge were more numerous this year than I have ever seen them before.

It was particularly gratifying to see so many representatives of the Government at the Park this year. It makes your staff feel that an interest is being taken in this great national Park, and acts as a stimulus to greater exertion on their part. The people of our own Province, too, have taken a much greater interest in us and our work. One thing has been very marked this year, the fact that fishing was not the only inducement, the rod often being forgotten in the delight of seeing the wild life, and the camera very often took the place of the rod and line.

I have the honour to be,

Sir,

Yours very respectfully,

G. W. BARTLETT,

Superintendent.

RONDEAU PARK.

Appendix No. 27.

MORPETH P.O., January 6th, 1910.

To the Honourable, the Minister of Lands, Forests and Mines.

SIR,—I have the honour to submit this my report for the year 1909. Considerable work has been done towards improving the appearance of the Park this season; cutting the lower and dead limbs off the trees along both sides of the driveway leading into the Park, and in numerous places on the picnic ground; also cutting and pulling down the entangled masses of wild grape and other climbing vines, that have in the past covered over a good many trees with foliage so dense that they could not live. Although some of these clusters of vines were beautiful to look at, it was considered advisable to remove them and save the trees. Also grubbing and cutting out the hazel and other bushes that were growing over portions of the picnic grounds and along the driveways, and the willow bushes along the shore of the Eau Front. This work was done at a cost of \$351.78.

The next work of importance was gravelling the Park Road in October from the town-line to the pavilion, a distance of about 1 3-8 miles, at a cost of about \$318.43. The road is now in better shape for winter and the coming season than it has ever been since it was built. It is becoming a favourite run for automobiles. Most people visiting the Park in their autos take a trip up the south road along the shore of Lake Erie to the second fishery, a distance of about six miles, and are usually delighted with the scenery in the forest; the deer and black squirrels, etc., along with the variety of timber and shrubbery make the trip most attractive. We are quite safe in saying that there are 150 deer running at large in the Park forest. In the enclosure at the picnic grounds, where the public can view them at any time, are some deer, black squirrels, wild geese and six different kinds of pheasants all in good condition.

There are about 30 summer cottages at the Park, and more campers than usual came to occupy them when the season opened (which was later than usual), and they continued to come, thus keeping the cottages full throughout the season. Mr. Arthur Orendorf deserves credit for the manner in which he conducted the refectory. Besides keeping a good stock of refreshments on hand at all times, he kept a fair stock of groceries, stationery and other useful articles. There were no complaints from the people.

The boat livery business is enlarging each year, chiefly on account of there being a good class of boats of various sizes and kinds kept in readiness and in good condition. Mr. Fred. Weir, who has this privilege leased from the Department from year to year, builds all his own boats—rowboats, sailboats, launches, etc.—and he intends to build a large launch that will safely carry from 75 to 80 passengers for this coming season.

With a little extra help we repaired the washout at the end of the high dock, also along the low part, so that it will wear for some time, but it is difficult to say how long, on account of there being so much fine washed sand around it. The square timber, lumber, hardware, extra help for grading, etc., amounted to about \$52.00. To make this dock fit for teaming loads over, it will be necessary to either lay plank on the sand approach, or cover it with clay and gravel.

I have good reason to believe that an electric railway will reach the Park within two years. The C. W. & L. E. Co. intend to extend their line to Blenheim this year, and when they continue the line farther east, I understand that it is their intention to run a spur down to the Park. Then I think it would be advisable for the Government to offer the railway company every reasonable facility to build a good large public house, that will be a credit to the Park. The necessity of a public house here is becoming more apparent every year, and this seems to me to be the most feasible way of getting one built.

I have the honour to be,
Sir,
Your obedient servant,
ISAAC GARDINER,
Caretaker and Ranger.

Appendix No. 28.

List of Persons holding Cullers' Licenses, issued under the Ontario Cullers' Act, up to 31st October, 1909.

Name.	P. O. Address.	Name.	P. O. Address
nderson, M. M	Almonte.	Brandin, Martin W	Peterborough.
Ilan, James D.		Bell, John C	
appleton, Erwin B		Bartlett, George W	Warren.
lbert, Andrew		Brown, Silas	
dams, J. Q		Boland, W. G	
nderson, Patrick J		Baulke, George R	Aylmer, Que.
Inderson, J. C		Bouchey, Arthur	Massey.
llan, Alfred	Ottawa.		Trout Mills.
llen. R. A	Bannockburn.	Barrett, W. J	Thessalon.
ikens, Geo. M	French River.	Bromley, Thomas	Pembroke.
appleby, Ridley	Katrine.	Bremner, John L	Admaston.
dams, James M	Sault Ste. Marie.	Breen. Bernard	Garden River.
ylward, James	Peterborough.	Buie, Dougal	Providence Bay
rchibald, John L		Baker, Thomas	Blind River.
Austin, Wm. G	Renfrew.	Blais. Felix	Hull, Que.
anderson, Charles	Little Current.	Balsdon, George	Keewatin.
Anderson, John	Cartier.	Bromley, W. H	Pembroke.
Adair, Thomas Albert	Gananoque.	Bowers, Isaac	Little Current.
Inderson, J. G	Alpena, Mich.	Brown, Thomas	Barrie.
lexander, Samuel	Arden.		W. Huntingdon
dams, Wm	Westmeath.	Bates Robert	Kenora.
arkle, George		Binnie, Thomas	Port Arthur.
rmstrong, Jas. Theodore.		Blair, William	Keewatin.
rmstrong, Thomas J	Arnprior.	Bick, Thomas	Bobcaygeon.
cheson, Ira M	Westmeath.	Burke, John Thomas	Midland.
Albert, Alfred E	Ottawa.	Buchan, Sterling	L'Original.
Alma, John E	Hawkesbury.	Brown, Joseph A	Spanish.
dams, George A	Longford.	Baird, P. C	Rainy River.
insley, John Albert		Brill, J. W	Mine Centre.
ansley, John Jenkins	Thessalon.	Beattie, Arthur W	Arnprior.
insley, Alexander	Spanish.	Brock, H. S	Ottawa.
pleton, E. A	Kenora.	Benson, John Bird	Midland.
rnill, William	fron Bridge.	Brennan, Rich'd Lawrence	Peterborough.
dams, Fred	L'Original.	Brown, Hugh Riside	Huntsville.
lexander, R. Harvey	Spragge.	Bryan Frank	Keewatin.
lexander, J. Albert	Spragge.	Bennett, Edward Clinton.	Ahmic Harbor.
inslie, Donald McF	Whitestone.	Blaine, Harvie Thomas	Orillia.
ansley, William	Thessalon.	Barrett Thomas	Barrie.
		Bickell, James Manuel	Sault Ste. Mari
Brophy, Michael Patrick.	Massey Station.	Buiggon William	Sudbury.
Soland, Abraham	Cartier.	Borrett, James A	Sault Ste. Mari
rown, Singleton		Bliss, C. Lidden	Sudbury.
Barry, Thomas James		Bray, James	Kinmount,
lanchet, Paul Fred'k	Ottawa.	Bremner George	Arnprior.
Bird, W. S	Parry Sound.	Bromley Samuel	Pembroke.
Bayley, James T	Gravenhurst.	Brown A C.	Fitzroy Harbo
Bell, Henry	Ottawa.	Berlinguet, Julius	Opimicon, Que.
Beach, Herbert Mahlon	Ottawa.	Blastorah Fred L	Harwood.
Barry, Thomas	Millbridge.	Burns Clifton H	Little Current.
Beatty, W. R	Parry Sound.	Beaumont, Ernest	Parry Sound.
Brooks, Frederick Wm	Mackay's Station.	Reattie Alex	Whitney.
Brown, Robt. D	Port Sidney.	Brennan, Reginald	Gravenhurst
Breed, Arthur G	Penetanguishene.	Boyd. George	Gravenhurst
	Muskoka Mills.	Bissell, Geo. Thomas	Trenton.
Barnes, Thomas Geo. Lee.			
Buchanan, Robert	Coldwater.	Baxter, Richard	Deseronto.
Buchanan, Robert Beck, Jacob Frederick Bird, Joseph Manly	Penetanguishene	Baxter, Richard Breeaugh, Edward Boyd, Geo. A	Deseronto.

Name.	P. O. Address.	Name.	P. O. Address.
Barrett, Patrick	Arnprior,	Cochrane, George	Peterboro.
Brundage, Alfred W	Pembroke.	Coburn, John	
Brougham, Thomas	Eganville.	Crowe, Nathaniel	Bobcaygeon.
Blair, Robert I	Arnprior.	Cameron, Alexander	Norman.
Benson, John W	Sturgeon Bay.	Chrysler, Frank R. L	Webbwood.
Beck, Chas. M., Jr	Penetanguishene.	Callaghan, Thomas, Jr	Campbellford.
Beatty, W. J	Coldwater.	Carson, Hugh	Kenora.
Burns, C. W., Jr	South River.	Calder, George	Woodville.
Bell, John Henry	Burk's Falls.	Callaghan, Dennis	Campbellford.
Berry, Harold	Labelle, Q.	Corrigan, Robt. T.	Emo.
Black, George	Barwick.	Cameron, John H	Kenora.
Bettes, John Hiram	Muskoka Mills.		Little Current.
Brady, John	Renfrew.	Cameron, John K	Spanish River.
Brown, James	Buckingham, Q.		Little Cur: ent.
	Blind River.	Coons, Geo. Washington	Peterboro.
Brooks, W. J	Nairn Centre.	Chisholm, Geo. Leopold	Sault Ste. Marie
Brinkman Alaw D	Sault Ste. Marie.	Clark, Wm. J	Birkendale.
Brinkman, Alex. B Black, Jacob	Barwick.	Carr, Herbert E.	North Bay.
Beattie, W. J.	Arnprior.	Cochrane, Alfred L	Muldoon, Que.
Bromley, William	Westmeath.	Campbell, George	Fort Frances.
Bissell, Hartie	Trenton.	Chalmers, George James	Peterboro.
Brown, Robert	Starrat.	Caverly, David Charles	Parry Sound.
Beaton, Hugh	Waubaushene.		Little Current.
Poilor Anthon	Parry Sound.		Arnprior.
Bailey, Arthur	Parry Sound.	Carmichael, Donald	Arnprior.
Burd, James Henry Bailey, Samuel James	Orillia.	Carty, John	Arnprior.
	Renfrew.	Cleary, Patrick M	Arnprior.
	Huntsville.	Caldwell, James M	Callendar.
- 0, 00, 0 thin 02: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Rockdale.	Cushing, John J	Davidson, Que.
	Sundridge.		Thessalon.
Brennan, Edward Scott Bell, John Arguey	Klock's Mills.	Cullen, Michael J	Massey Station.
Bromley Edw. H	Pembroke.	Cuthbertson, William	Arnprior.
	Byng Inlet.	Carss, Percy	Thessalon.
	Spanish Station.	Coghlan, Michael	Chapeau, Que.
Brazziel, Leonard	Spanish Station.	Cameron, Alexr. Gordon	Beauchene, Que.
	Bryson, Que.	Cassady, W. W	Emo.
Barrie, Nicholas J	Ottawa.	Carter, Robert E.	Fesserton.
	Kenora.	Coleman, Jos	Baysville.
Bowen, Thomas	Deseronto.		Sudbury.
Brown, James F	Baysville.	Cameron, W. D	Kenora.
Plastorch Pornard	Harwood.	Crandall, F	Port Arthur.
	Pembroke.	Campbell, James R	Eganville.
Bromley, Thomas	Webbwood.	Campbell, John A	Galleta.
	Fort Frances.	Caillier, Hyacinth	Arnprior.
Bradley, J. M	Mine Centre.	Chamberlain, Thomas	Bobcaygeon.
	Webbwood.	Cooper, David Allan	Millbrook.
Burns, Dominick		Cox, Henry	Ballerica, Que.
Campbell Bohant Tob-	Flinton.	Currie, James	Ottawa.
rate, respect committees	Arnprior.	Clarkson, A. E	Midland.
	Trenton.	Clairment E	Gravenhurst.
	Bracebridge.		Sturgeon Bay.
Carson, James	Bracebridge.	Connolly, David	Gravenhurst.
	Bracebridge.	Campbell, P. C	Sault Ste. Marie.
	Campbellford.		Midland.
Clarkson Pohont T	Parry Sound.		Arnprior.
	Hintonburg.	Christie, William Pringle.	
	Burk Lake.	Campbell, C. V	Sault Ste. Marie.
	Gravenhurst.	Clegg, Samuel	Peterboro.
			Gravenhurst.
			Gravennurst. Spanish Station.
Comonon Was		vania Symmey P W 13	SDATHSH STATION.
	Midland.		Baysville.

		_	
Name.	P. O. Address.	Name.	P. O. Address.
	G 111	≥	
Charlton, George A	Collingwood.	Davis, J. P	
Cahill, Thomas	Nosbonsing.	Dale, John Alexander	
Chew, Manley		Dinsmore, Chas. L	
Cooper, James Eddly		Drum, Patrick	Belleville.
Cook, Reinhardt	South River.	Durham, Edgar S	
Crowe, Cecil	Bobcaygeon. Trenton.	Duquette, Chas	
Callaghan, Dennis	Barryville.	Davis, William Albert	
Collins, James	Fort William.	Dickson, Robt. Alexander.	
Claffey, Edward D	Chelmsford.	Dawkins, John	
Coyne, Phin	Blind River.	Doxsee, James E Didier, L. P	
Constantine, Eudore	Gordon Lake.	Devine, Patrick J	
Campbell, Daniel N	Buckingh'm, Que.	Dinsmore, Richard	
Canniff, R. W	Kenora.	Dunn, Percy E	
Cassidy, S. C	Dunchurch.	Duval, Chas.	
Charleston, John Baptiste.	011	Donlevy, James	
Comer, Billa F	Tweed.	Doris, Patrick	
Carter, George	Sundridge.	Doris, John	
Corrigan, Robt. J		Donahue, Michael	
Caswell, Grant	Coldwater.	Doran, W	
Caswell, Geo	Coldwater.	Dickson, Robert R	Kippewa, Que.
Chemir, David A	Pembroke.	Donlevy, Wm. C	Rockcliffe.
Clairmont. Philadelp L		Duff, Chas. A	Stewartville.
Crowe, Edgerton	Bobcaygeon.	Dean, James C	Kenora.
Castonquay, A. C	Chelmsford.	Duff, Peter A	Claybank.
Clark, Donald Allan	Port Arthur.	Duncan, Downey	
Charette, Herbert	Devlin. Fort Frances.	Dougherty, J. M	
Christie, Uriah W	Fort Frances.	Dunn, John F	
Clark, Joseph C	Bobcaygeon.	Dyke. Morris F Devitt, Frank	
Campbell, Duncan W	Stewartville.	Dickie, David	
Callahan, Thomas N	Arnprior.	Dupuis, Alfred	
Clements, Albert James	Bent River.	Dupuis, Affred	Reewatin.
Carney, Albert	Sault Ste. Marie.	Enlaw, Oliver	Camphellford
Collins, Arthur	Massey Station.	Ebert, Andrew P	
Carter, George	Lavelle, Que.	Ellis, Alexander	
Chitty, Alfred E	Kenora.	Ellis, John	
Cardiff, Richard J		Errington, Joseph	Sundridge.
Conway Thomas	Barry's Bay.	Eddington, Henry John	Parry Sound.
Costello, Thomas M	Antrim.	Enright, Daniel	Port Arthur.
		Eager, James	
	35-41-	Elliott, Porter P	
Didier, Hector	Mattawa.	Elliott, William	
Doran, Frank	Barryvale.	Edgar, J. E	
	Parry Sound. Arnprior.	Elliott, George E	
Duff, R. J Durrill, John W	Ottawa.	Edwards, Joseph K	
Dickson, John	Sundridge.	Eldridge, Robert	rort Frances.
Dickson, James L	Michipic'ten H'r.	Fraser, John A	IZ on one
Dobie, Harry	Sault Ste. Marie.	Ferguson, Wm. H	Renora. Rod Roy
	Sault Ste. Marie.	Forbes, Chris. McKay	McLoan's Donot
Danter, R. W		Fitzgerald, E. Clair	Parry Sound
Doyle, T. J	Eau Claire.	Farrell, W. H	
Dobie, Alexander R	Blind River.	French, Lewis William	Byng Inlet.
Darling, J. M		Fraser, William A	Mattawa.
Dillon, John	Calabogie,	Finerty, Patrick	Rochfort.
Durrell, Jos. Nelson	P'rt'ge du F'rt, Q.	Farnand, Frank	Diamond.
Durrell, John	Callander.	Fulton, Philip S	Spanish Station.
Donally, Richard S	Suabury.	Fitzgerald, Ullyot C	Parry Sound.
Devine William		Fenn, George	Bracebridge.
Durrill, William	Nosbonsing.	Fortune, Owen	
Draper, Patrick	wuyon, Que.	Fraser, David	Norman.

Name.	P. O. Address.	Name.	P. O. Address.
		<u> </u>	
France, John	Collin's Inlet.	Golden, Frank J	
Ferguson, Ernest A	Baysville.	Garson, Robert	
Ferguson, Alpen	Mattawa.	Gropp, August	Penetanguishene.
Ford, John William B	P'r'tge du F'rt, Q.	Grozelle, Antoine D	
Ford, Charles	Wahnapitae.	Goulais, James	Peterborough.
Findlay, J. H	Braeside.	Grayson, Charles	Keewatin.
Fraser, James	Renfrew.	Gladstone, Harry E	
Fairen, Francis		Guertin, Oliver	
Faulkner Jos		Gelinas, Frank	
Fraser, Alexander, Jr		Gwynne, John	Hawkesbury.
Fairbairn, William		Gray, Frederick M	
Fraser, Wm. A		Graham, Edward G	
Fraser, Foster	Pembroke.	Griffin, James	Spanish River.
Fraser, Wm		Gordon, Alexander B	Pembroke.
Fraser, Hugh Alexander		Gareau, Noah J	Pembroke.
Flaherty, John		Gillies, D. A	
Fisher, Wm		Gilligan, Edward	Mattawa.
Fox, Thomas		Gladman, Charles	Parry Sound.
Fallis, James W		Garrow, John D	Ottawa.
Fairbairn, N. H		German, William Burton	wannapitae.
Friel, John		Gordon, Robert W	
Fox, Charles		Guertin, Nelson Gardner, John	Petawawa.
Featherstonehaugh, W. H	Westmanth		
Friar, Schuyler		Gunter, Peter M	
Farren, Joel		Glennie, William	
Fraser, Duncan	Dig Forks,	German, Maurice J Gillies, John A	Proceeds.
		Goddin, Edward	
Fraser, John	Spanish Chatt	Grant, Joseph	
Foster, Wm. C	Soarchment	Gilmour, James B	Progrado
Frazer, Jas. C		Gorman Joseph P	Soult Sto Morio
Fremlin, H. P	Richards' Lond's	Gordon, Thomas A	Hall's Bridge
Foster, Ed. G.	Sault Sto Mario	Gray, Albert H	Riscotaging
Farrel, Peter M		Gadway, John	Parry Sound.
Fairhall, Edward		Garrow, Edward	Webbwood.
Fraser, Levi	Bracehridge	Golding, William	Dorset.
Fiddes, James	Rainy River	Gillies, Harry	White Lake.
Frawley, Frank			Nelson.
Fisher, George	Sault Ste. Marie		Cook's Mills.
Filiatrault, J. A	Blind River.		Huntsville.
Farrier, John William	Chapleau.	Ganton, David	Trout Creek.
Finney, Benjamin B	Fort Frances	Graham, George L	Arnprior.
Follis, Frank C	Hawkesbury.	Graham, Frederick S	
Fortune, Percy H	Blind River	Gill, Cuthbert	
Fraser, Wm. Foster	Sault Ste Mario	Graham, James Robert	
Fraser, Allan H	Thessalon.	Graham, Thomas Jordan	Byng Inlet.
Farquharson, James	Tomiko.	Gaudaur, Antoine Daniel	Orillia.
		Gorman, Patrick	
Griffith, Geo. F	Pembroke.	Guy, Charles	~
Graham, John	Arnnaion	Graham, George H	Gillies Depot.
Golden John	Gilmour.	Greer, George P	
Gunter, Henry M	Trenton		Fort Frances.
Goltz, Ernest			Englehart.
Green, Forman A	Gilmour.		Diver.
Green, Samuel E	Donner Cound		Kenora.
Grant, John	Flinton.	Greer, Samuel H	Gore Bay.
Green, Arthur		Gilbert, Sidney N	namy kiver.
Green, Norman McL	Bancroft.	Hale, Thomas	Pembroke
Gillis, John J	Whitefish.	Hogan, Albert J	Sault Ste Marie.
George, R. W	Parry Cound	Hogen Edmund C	T 1112
Gardiner, John		Hagen, Edmund G Hagen, Wilson	Little Rapids.

List of Persons holding Cullers' Licenses.— Continued.

Name.	P. O. Address.	Name.	P. O. Address.
Name.]
Hurd, Cyrus	Parry Sound	Hawkins, William A	Pembroke.
Henderson, Albert E	Burford.	Herring, Edward C	Sebright.
Hale, John B	Sault Ste. Marie.	Hatch, J. W	Dryden.
Hickerson, Melvin T	Fort Frances.	Hoard, Wm. Paris	Emo.
Howey, George H	Fort Frances.	Hartman, W. R	Blind River.
Hartt, James	Gilmour.	Hill, Ernest L	Hawkesbury.
Hayes, James	Enterprise.	Hall, Samuel S	Marmora.
Humphrey, T. W	Gravenhurst.	Hasleton, Constantine	Killaloe.
Huckson, A. H	French River.	Hamilton, A. J.	Spragge.
Handley, Robert	Douglas.	Heggart, E. C	Trout Mills.
Howe, Alexander	Queensborough.	Hunt, Ronald E	Massey.
Hurd. Edwin	Hurdville.	Hurd, Asahel	Parry Sound.
Huff, J. S. Morris	Arnprior.		Donner Coun d
Halliday, Robert J	Lindsay.	Irving, Thos. H	Parry Sound.
Hutton, John	Hutton House.	Irwin, Eli	Kenora.
Hutchinson, Wm. E		Irving, Edward C	Kenora.
Hogarth, Joseph Rowan		Johnston, Ralph E	rort Arthur.
Humphrey, John		Johns, Frank A	TOLOUIO.
Hill, Joshua		Jackson, Robert	Diecum.
Hall, David		Johnson, Finlay	braceoutige.
Hartley, Charles		Jones, Albert	victoria marbor
Hawkins, Henry Chas		Johnson, Thomas	Loncal Feon.
Hines, Philip Wallace		Johnston, Archibald M	worman.
Hudson, John Lewis	Combermere.	Julien, Charles	renton.
Hurdman, William H	Ottawa.	Junkin, Henry	Marmora.
Hughes, John		Johns, Frank	Alpissing Junct
Howie, R. G		Jessup, Edward D	Саспе Бау.
Helferty, Dennis		Johnson, Frank N	Ottawa.
Hamilton, Robert		Johnston, John	Peninsular Lake
Hoppins, Abiram	Kingston.	Johnson, S. M	Arnprior. Flinton.
Hoppins, Densmore		Jones, Frederick James	Casilerord.
Haystead, John Henderson, John Irwin		Johnston, William A	Wisawasa.
Hartley, William		Jervis, Henry	Fenelon Falls.
Higgins, John C		Jones, William	The Flats.
Harrison, John, Jr		James, Martin	Fort Frances.
Hawkins, E		Johnston, James	Callander.
Henderson, Charles		Johns, Alexander Jackson, John A	D
Halliday, Frank		Johnson, Thomas	Fort Frances.
Hammond, W		Johnston, George N	
Hall, Charles Asa	Penetanguishene	bonniston, deorge 11	
Hearl, John		Kintree Stuart	Little Rapids.
Howe, Isaac	Fort Frances.	Kerby, John	Belleville.
Halliday, James	Springtown.		Marmora.
Hurdman, J. A	Ottawa.	Kirhy Louis Russell	Ottawa.
Hawkins, Stonewall J	Meldrum Bay.	Kennedy, Timothy Kirk, Henry	Enterprise.
Hinchcliffe, William	Gunter.		
Henderson, Arthur	Baysville.	Knox, Milton	Ottawa.
Hillis, James M	Sutton West.	Knox, Milton Kinsella, Michael Pierce	Trenton.
Harris Wm., Jr	Day Mills.	Kitchen, D	French River.
Hogg, W. J	North Bay.	Kally Jaramiah	Suabury.
Hoxie, E. P		Kelly, Ferdinand	mattawa.
Hawkins, Walter	Pembroke.	Kennedy, T. J	Arnprior.
Ioward, James		Kenning, Henry	Pembroke.
Howard, William		Kirby, D. F	Belleville.
Hogan, Enos W		Kirkpatrick, David	
Horne, John T		Kean, John F	
Hamilton, Chas. E	Kenora.	Kellett, Fred	
Henderson, Leonard	Baysville.	Kelly, Michael J	
Hunter, Thos		Kirk, William James	
Hamilton, Robert J	ottawa.	Kerr, E. G	Thessalon.

Name.	P. O. Address.	Name.	P. O. Address.
King, Napoleon	Mattawa.	Lawrie, John D	Parry Sound
Kean, B. F		Lovering, George Francis.	Coldwater
Kemp, Orval Wesley		Lucas, R. G	Christina.
Kirk, Charles Barron		LeBlanc, Edmund C	Chapleau.
Kingsland, W. P		Lavigne, John	Avlmer One
Kerr, John B		Landell, Charles S	Huntsville
Kennedy, Walter		Long, Henry Elisha	Mattawa.
Kennedy, John		Lynch, W. H	Collingwood.
Knox, Wm. M		Laplante, Francis	Byng Inlet.
Kingston, Robert		Lindsay, James	Arnprior.
Kearnan, Edward		Labelle, Michael	Arnprior.
Kearney, Michael John		Legree, John	Dacre.
Kendrick, John		Legree, James L	Calabogie
Kendrick, John L		Leigh, John Chas	Gravenhurst
Kennedy, John W		Lloyd, Edward B	King.
Kelly, James F		Lemyre, Bruno	Gravenhurst.
Kauffman, Julias		Lavelle, Charles H	Canoe Lake
Kennedy, Sylvester		Lyons, James	Waltham Sta O
Kernahan, George A		Ledwood, Charles	Ottawa
Kehoe, Martin		Levelle, Emrey	Waltham Sta
Kennedy, Daniel J		Little, Theo	Kenora.
,		Lehman, Joseph	Stratton Station
Transith Evencia	Arnprior.	Lafare, Mark	Cache Bay
Leannoth, Francis	Warren.	Leach, George	Vermilion Bay
Lee, James	Severn Bridge.	Lott, Angus M	Spanish Mille
Lloyd, Alfred Lawrie, Frank A	Parry Sound.	La Belle, Ambrose	
Latimer, Jas	and the second	La Breen, Douglas	
Lemyre, Middey	Campbellford.	Lavelle, Michael J	
Lutz, Jacob	70 00 -	Lyleton, J. E	Parry Sound
Luby, John E	Ottawa.	Lalor, William J	Aspdin.
Law, Wm. J	Markstay.	Lalonde, Joseph Maxine	
Lummis, Daniel	C1 .		
Lowe, W. C	1_	Malloy, Mark	Baysville.
Londry, S. C	Q 31 Q1 35 4	Martin, Hugh	
Lochnan, James	0.11	Miller, R. O	
Link, Henry W	1011	Morrison, James	
Ladarotte, John	A •	Murray, Frederick	
Lochnan, John		Menzies, Archibald	
Lozo, John		Manning, James	
Loughrin, Lawrence		Martin, Philip	
Linton, J. H	- ~	Malone, Wm. Patrick	
Ludgate, James	-	Marsh, Esli Terrill	
Lee, Robert		Miller, John W	
Langford, Mark		Muchinbacker, Asa	
Letherby, Edwin		Morris, Geo. F	French Bay
Leahy, Francis M		Murray, George, Jr	
Langford, Henry		Maughan, Joseph	
Lessard, Philip		Margach, Wm. J	
Lovering, William James	Coldwater	Murray, George, Sr	. Wauhaushana
Lane, Maurice	Bobcavgeon	Manice, Wm	. Peterborough
Lenton. George		Murray, Wm	. Kenora
Lowe, Thomas A		Morgan, Richard J	Kenora
Livingston, Robert M	Huntsville	Magee, Thomas Arthur	Kenora
Londry, William E		Murdoch, James	
Labelle, James	Waltham Oue	Mulvahill, Wm	Arnnrior
Labelle, Eli	Waltham Oue	Murphy, Arthur	
Ladurante, J. D		Mayhew, Jacob	Northeoto
Ludgate, Theodore		Molyneaux, George	Parry Sound
Lucas, Frank		Milway, Joseph	Fort William
Lunam, Duncan	Colleged One	Mackie, Nathan	Port Arthur
Lott, George		Milne, Archie	

Name.	P. O. Address.	Name.	P. O. Address.
Murray, James	Peterborough.	Mackey, Levi Ralph	Keewatin.
Moore, James A. E		Morley, Frank W	Kenora.
Merkley, William A		Madden, F. M	Haileybury.
Murphy, Hugh R	Ottawa East.	McCaw, Joseph E	Tweed.
Murphy, W. J	Arnprior.	McLaren, Peter	Kenora.
Murray, William	Markstay. Warren.	McGregor, Colin F	Kenora. Kenora.
McFarlane, Robert L Martin, Edgerton	Markstay.	McKenzie, Robert	Bracebridge.
Mathieson, Archie		McFadyen, A. J	Goulais Bay.
Moore, Henry R		McDonald, John C	Spanish Mills.
Mickle, Chas S		McKenzie, Alex E	Ausonia.
Mullen, James	Webbwood.	McIntyre, John	Arnprior.
Morley, A. W	Winnipeg.	McDermott, Thos	Orillia.
Macdonald, James M		McDermott, Jas. E	North Bay.
Money, Harry	Haileybury.	McCrindle, Jas	Sudbury.
Mather, Allen Menzies, Alexander		McGhie, Chas. S	Whitestone. Whitby.
Munro, Peter P	Commanda.	McGenigal, John H	Arnprior.
Mason, Benjamin	Westmeath	McCart, Patrick McGrath, Thos. B	Peterborough.
Monaghan, John B	Arnprior.	McCormick, James J	Trenton.
Monaghan, M. J	Arnprior.	McCarthy, Wm	Fenelon Falls.
Mulvihill, John	Arnprior.	McAvoy, Owen	Campbellford.
Moran, Andrew	Rockingham, Qu.	McConnell, Lewis	Fesserton.
Mulvihill, Michael	Arnprior.	McMullen, George	Spragge.
Mann, John	Manitowaning.	McNab, Angus	Burnstown. Quyon, Que.
Monaghan, John Dorland.	Deseronto.	McColgan, C. H	Arnprior.
Matheson, Wm	Chalmeford	McCallum, Webster McCagherty, Robert E	Westmeath.
Munro, Alex. G	Braeside	McNab, Archie	Calabogie.
Murphy, Oliver A	Marksville.	McDonald, Malcolm	Spragge.
Mellor, Charles	Port Arthur.	McIvor, J. A	Fort Frances.
Millions, Harry	Gillies' Depot.	McCulloch, M	Kenora.
MacDonell, R. D	Biscotasing.	McDonagh, Rod	Callander.
Milne, Fred Milne, William H., Jr	Yearth Day	McManus, James	Arnprior. Curran.
Murphy, Dennis	Thessalon.	McKinley, J. H	Rama.
Mackle, Thomas	North Lake.	McPherson, Jas. S McKinley, Edward C	Toronto.
Miller, P. H	Blind River	McClelland, John	Parry Sound.
Munro, Philip	Braccido	McFarlane, J. W	Cache Bay.
Mangan, Patrick	Arnorior	McDonald, Roderick	Pembroke.
Marcil, Peter	Ottawa.	McCormack, Wm	Fembroke.
Main, Samuel	Spanish Station.	McCreary, William	Arnprior
Moore, David Henry	Huntsville.	McCuaig, James C	Bryson. North Bay.
Murphy, John	Arnarion	McColman, Peter	Gravenhurst.
Mathieson Daniel	Chelmsford	McLeod, James D McCrimmon, N. K	Blind River.
Willne, Wm.,	Ethal	McCreary, James, Jr	Arnprior
Mangan, Charles	Burk's Falls	McPhee, Hugh	Byng Inlet.
mooney, Lincoln	Orillia	McCudden, James	Arnprior
Mangan, John	Arnprior	McLachlin, J. A	Arnprior
Mooney, Thomas	Kingston.	Macpherson, John	Ottawa.
Mason, Robt. T	Rochesterville.	McEachren, John A	Gravenhurst W. Gravenhurst.
Morrison, Donald	Gravennurst.	McClelland B H	Parry Sound.
Moore, Wm	Boheavgeon	McClelland, R. H	Campbellford.
Mutchenbacker, Herman	Rosseau Falls	McDermottt Peter	Orillia.
Moore, Norman	Arnprior	MeIlroy, John	Madoc.
Morley, John R	Kenora	McNab. Robert J	Parry Sound.
Mackay, J. A	Big Forks.	McFadden, James	Ottawa.
Miller, Robt	Montreal.	McIntosh, James G	Carleton Place.

		•	
Name.	P. O. Address.	Name.	P. O. Address.
McInnis, Hector D	Bracebridge.	McLachlin, Alexander	Arnnrior
McKinnon, Malcolm		Mackey, Edward	
McLean, Daniel		McEwan, Henry	
McKinnon, Archie J	Bracebridge.	McDonald, Alfred	Peterborough.
McKay, D. C	Baysville.	McGeary, John J	Sundridge.
McDonald, James	Parry Sound.	McDonald, Archibald W	
McPherson, Allan	Longford.	McGaw, John Gillen	Queensborough.
McDonald, James P	French River.	McCauley, Barney	Trenton.
McFarlane, Jos. C		McDougall, James T	Klock's Mills.
McNabb, Alexander		McInenly, Thomas	Quebec, Que.
McGillivray, Archibald		McBride, Archibald	
McGrane, Edward		McFarlane, Robert L	Arnprior.
McLeod, Donald, Jr		McGowan, Wm	Parry Sound.
McDonald, Hector R		McLachlin, Norman	
McDougall, Duncan McNabb, Alexander D		McDonald, Laughlin	Pendleton.
McCormack, John C		McIvor, William J McKee, John P	Collins Inlet.
McNamara, John		McGowan, Thomas	Sturgeon Falls.
McGillivray, Duncan D		McDermot, Patrick	South Divon
McIntyre, Daniel A		McKay, Angus	South River.
McNamara, Lewis		McDonald, A. J	Longford
McDonald, Sydney C	Mattawa.	McInnis, Angus D	Gravenhurst.
McGurn, John J	Buckingham, Qu.	McKendry, Alexander	Waubaushene
McKeown, Jno. Joseph		McGuire, Timothy	North Bav.
McNeel, David	Sault Ste. Marie.	McGrath, John	Peterborough
McEwan, Andrew	Thessalon.	McWilliams, Jno. Bannon.	Peterborough.
McCool, Christopher L	Cartier.	McCagherty, Patrick	
McCollom, Donald	Arnprior.	McKendry, Daniel	
McDowell, Wm	Cache Bay.	MacDonald, D. F	Parry Sound.
McConnachie, Roy Stewart		McManus, Thomas J	
McDonnell, J. K	Rat Portage.	Macfarlane, David R McColgan, Edward	Ottawa.
McDonald, Alex. J	Vermilion Bay. Rainy River.	McKay, John	Emo.
McKay, D. A	Kenora.	McKinnon, William	
McPhee, Ronald	Bracebridge.	McKittrick, Frank R. F	
McKay, George Donner	Dorset.		North Seguin.
McWilliams, Maxwell		McIlroy, Thomas Davis	Madoc.
Theodore	Peterborough.	McDonald, Wm. Henry	Trenton.
McLeod, John	Keewatin.	McGaw, Wm. Thomas	Callander.
McPherson, George	Keewatin.	McMillan, L	
McDougall, John D	Kenora.	McDermott, John L	
McGregor, Duncan	Burnstown.	McDonald, Chas. M	
McLean, Peter W	Sand Foint.	McPhee, Benjamin	
McNichol, John	Sudbury.	McGee, John Edward	
McInnis, D. E	Cache Bay.	Macfarlane, Mack	
McLaughlin, Samuel	Waubaushene. North Bay.	MacCallum, Alexander McRae, Farquhar	
McCollam, John McManus, John C	Arnprior.	MacCallum, Albert	
McLean, John	Blind River.	McGonigal, John	Arnprior.
McLeod, Norman	Garden River.	McConachie, John	
McLean, James	Blind River.	McKay, D. G	Kenora.
McNally, J. A		McDonald, James	Peterborough.
McNab, Alexander	Arnprior.	McCulloch, John L	Lonsdale.
McFarlane, Alexander	Renfrew.	McConnell, James	Mine Centre.
McFarlane, J. D	Stewartsville.	McIntyre, William John	
McFarlane, Duncan		McDonald, Allen	Big Forks.
McKendry, Wm. B		McLay, Albert	Devlin.
McPhee Hugh		McQuarrie, Daniel	Fort Frances.
McPhee, John		McNaughton, Daniel McCagherty, William E	Bracebridge.
McLachlin, Peter	Arnprior.	moonghorty, william 19	westineath.
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Name.	P. O. Address.	Name.	P. O. Address.
McDonald, John D	Mattawa.	Presley, J. F	Ashton.
McCagherty, Joseph T	Westmeath.	Power, James	
McAdam, Arch H	Quyon, Que.	Patzel, Adolph	
McMurphy, Dugald, Jr		Plaunt, William B	
McCall, Alfred		Plaunt, Joseph	
McRitchie, William			Longford.
McRitchie, Malcolm	Kenora.	Preston, R. E	Kenora.
McDonald, John Harold	Rydal Bank,	Petrie, Geo. A	Fergus.
McAuley, William Davis	Sault Ste. Marie.	Pomeroy, Peter	Trenton.
McCallum, Thomas	Fort William.	Perry, Pringle K	Byng Inlet, N'th.
McWhinney, Fred	Kenora.	Purcall, W. G	Ottawa.
McNairney, Hugh H	Sudbury.	Purvis, John	Parry Sound.
McKelvie, William	Otter Lake Sta.	Porter, James	Uphill.
McGovern, Frank	Sault Ste. Marie.	Pearson, John James	Lindsay.
McCallum, Gordon	Fort Frances.	Penney, Chas G	Cache Bay.
McCallum, Henry	Fort Frances.	Pennock, James P	
McLaughlin, Russell	Spanish Mills.	Purdy, John A	Uxbridge.
McAdam, Miner S	Quio, Que.	Playfair, R. J	Blind River.
McDougall, David A	Nesterville.	Paterson John	Wahnapitae.
McLeod, William A	Manitowaning.	Paterson, Alexander	Orillia.
	Transaction	Parke, James	Gravenhurst.
Nescott, George	Kenora.	Parquette, Oliver	Webbwood.
Newton, Frank	Gravenhurst.	Palmateer, Sherman	Gravenhurst.
Newburn, Wm	Parry Sound.	Paget, George	Huntsville.
Niblett, James	Arnprior. Osceola.	Pounder, Joseph	Westmeath.
Niblett, Robert	Kenora.	Pell, Richard D	Arnprior.
Nevison, Herbert	Owen Sound.	Perry, Frederick	Port Arthur.
Nicholson, John	Parry Harbor.	Paget, Charles Edward	Novar.
Newall, John H	Gravenhurst.	Porter, Thos. Robt. Mark.	Dorset.
Nolan, John	Victoria Harbor.	Pountney, E. J.	Arnprior.
Newton, Charles W	Vermilion Bay.	Pyburn, David J	Dorset.
Nent, Charles Needham, John G	Pakenham.	Purdy, Geo	Hintonburg.
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Oullette, Joseph P	Cutler.	Pipher, George E	Manageury.
O'Neil, Tnomas	Bancroft.	Pendee, David	Mowat.
O'Neill, Daniel H. H	Arnprior.	Piper, A. J.	Dind Dine.
O'Leary, Patrick J	Orillia.	Paget, Alfred H	Abmie II1
Oliver, Charles R	Fesserton.	Powers, John J	Trout Marbor.
Overend, George J	Longford Mills.	Pigott, William D	Fitzpor Horban
O'Brien, Andrew	Ottawa.	Potts, Cyril	North Lake
	Arnprior.	Pilkey, William	La Valloo
Oliver, J. A	Fort William.		
Owen, W. J	Wabigoon.	Quinn, William	Peterborough
O'Connor, John		Quigley, Hugh	Penetang
Oliver, Darcy		Quirk, Thomas J	Petawawa.
O'Connor, Wm			
O'Neil, James W		Debertsen D	Vones
O'Donnell, Wm		Robertson, D	
Owens, Richard	Canti-	Richardson, Fred'k George	
O'Reilly, Patrick	Cartier.	Richards, Richard	
O'Neill, Mark	Tranta-	Riddell, Geo. Alexander	
Orrill, John	Panaroft	Robertson, Lewis McLean.	
O'Neill. Patrick		Robinson, Wm. F	
Orde, Francis W O'Driscoll, Joseph	Nenora.		
O'Gorman, Peter	Blind Bivon	Richey, Evan	
o dorman, reter	Dind River.	Randall, Lewis G Richardson, Chas. Marvyn	
Pigott, John	Fitzrov Harbor	Rochester, Daniel Baillie.	
Paul, Charles A	Sault Ste. Marie	Riddell, James	
Patinson, Thos	Bracebridge.	Rice, Asa S	Hull One
Price, A. E		Roberts, T. A.	
	-		

Name.	P. O. Address.	Name.	P. O. Address.
Ross, Andrew	Longford Mills.	Simpson, Alfred E	Wakefield.
Rose, Donald M		Souliere, John B	Ottawa.
Rawson, Charles Edward.		Shields, James A	Carleton Place.
Ross, George	Waubaushene.	Spargo, George	Ottawa.
Roberts, Percy T		Smyth, W. H	Baysville.
Ritchie, Wm. D		Salmon, R. H	
Ramsay, Robert		Salmon, Alexander C	
Ritchie, J. F	-	Stremer, A	
Ritter, Samuel G		Shields, Frank A Stapleton, John J	
Rothera, Charles F		Sloan, William H	
Ryan, Alfred Rogers, Fred		Smyth, Job E	
Reid, George William		Sage, Nelson	Muskoka Mills
Robertson, John A		Seymour, Edward	
Robinson, Wm		Shaw, Thomas B	
Reid, Joseph B		Swanston, James	
Ross, Walter M		Simpson, William	Hall's Bridge.
Ruttle, H. A		Sadler, Thomas	Lindsay.
Richards, Benedict	Ottawa.	Smith, Patrick Albert	
Regan, John	Orillia.	Snaith, William J	
Russel, Wm	Pembroke.	Sinn, William F	Arnprior.
Ramsay, Charles	Sudbury.	Sheppard, Wm. Joseph	
Russell, Corsan L	Pembroke.	Spears, Milton B	
Richards. Henry	Dacre.	Stevenson, Arthur	
Rvan Wm	Killaloe.	Stein, Paul	
Reid, John P	Spanish Mills.	Shaw, Alfred	
Ridley, Robert	New Liskeard.	Sequin, Napoleon	
Riley, Charles W	Charich Mills	Scrim, Robert	
	Spanish Mills. Campbellford.	Sharp, James A Shaneay, Harry S	
	Dryden.	Smith, Wm	Ottown
	Cache Bay.	Stewart, Daniel	
	Orrville.	Sheehan, Michael H	
topo, III gazininini	Washago.	Smith, Sydney H	
	Washago.	Stewart, James A	Pembroke.
Robinson, Thomas G	Washago.	Sproule, Newton H	Schomberg.
Raycroft, William T	Sarnia.	Simmons, Alex	
Roberts, Ivor M	Garden River.	Scott, Thomas	Parry Sound.
	W. Gravenhurst.	Smith, Lawrence	W. Saginaw, Mich.
	Orillia.		Campbellford.
Robins, Etna Rosedale	Orillia.	Sullivan, John	Sault. Ste. Marie.
Regan, John, Jr	Orillia.	Sinclair, Finlay	
Ryan, James	Savanne. Cache Bay.	Shiels, Henry F Smith, Gideon Ousley	Cartier.
Rusk, Oscar W	Bracebridge.	Smith, John Wallis	Thodford
tobinson, inos. aco	Campbellford.	Smith, Henry G	Amendian
voorsby, will	Byng Inlet.	Story, John A	Arnprior.
tumesbottom, itobe	Arnprior.	Sweezy, Benjamin	Ullawa. Maggaw
	Galetta.	Sheppard, Charles H	Massey. Coldwater
Rowan, A. L	Sault Ste. Marie.	Sinclair, Armon D	Arnnrior
	Spragge.	Smith, Sidney E	Ottawa.
Ross, George Joseph	Schrieber.	Sleeman, Wm	Rapid River.
Rowe. Frank E		Sheehan, Peter F	Loring (canc'l'd).
		Sleeman, Geo	Rapid River.
		Sims, Wm. K	Sault Ste. Marie.
Smith, M. D	Fort William.	Skahill, Wm	Blind River.
Scanlan, William	Enterprise.	Shaw, George	
Sutherland, D. H	Gravenhurst.	Sarsfield, George Francis.	
Spanner, John	Huntsville.	Standish, Wm. H	Batchawaning
Shier, James D		Simpson, Wm. A	Lakefield. (Bay

	f		
Name.	P. O. Address.	Name.	P. O. Address.
Shuttleworth, Alma	Trout Creek.	Thrasher, Henry G	Pembroke.
Shanacy, Wm. J.	Spragge.	Tooke, Frank	Bala.
Seely, George	Arnprior.	Thorburn, Donald James	Thessalon.
Stewart, Alex. W	Lanark.	Tetreault, Philias	Tomiko.
Soreny, Wm	Braeside.		
Schneder, Frederick	Cache Bay.	Udy, Dean	
Smith, James D	Rat Portage.	Urquhart, Elias	
Sullivan, James		Urquhart, Andrew	Barrie.
Scully, Cornelius	. Whitney.		
Savoy, Eutrope	North Bay.	Vigrass, Percy J	
Smith, Walter J	Campbellford.	Vincent, Joseph	
Seymour, John J	Whitensh.	Vollin, Samuel	
Smith, Alex. R. C.	Burk's Falls.	Vannier, Nelson Joseph	
Stewart, Richard M		Vincent, James	
Souliere, John H		Vincent, Henry T	Port Signey.
Smith, Abraim G	Quyon, Que. Day Mills.	Vanderburg, Norman	wisawasa.
Swallow, C. H		Valois, Armand	Parry Sound
Strave, A. M		Villiers, Claude Vanier, John	Sault Ste Marie
Sullivan, George L	L	vanier, Juni	Cault Die. Maile.
Short, James	Kenora.	White, Thomas S	Bracehrideo
Shaw, Fred. Jason	Thessalon.	White, A. Thomson	
Short, Chas. J.	Kenora.	Watt, R. A.	Snanish
Smith, David H	Sudbury.	Wilkins, Hughes	
St. Hillaire, George	Arnprior.	Wallace, T. William	Blind River
Souliere, Joseph C	Cutler.	White, Joseph W	Bracebridge.
Scott, J. C	Fort Frances.	Watson, William	Huntsville.
Stewart, Frank E	Crozier.	Webb, George W	Parry Sound.
Sanders, Edward	Barwick.	Wilcox, Thomas	Parry Sound.
Taylor, Fred. L	Parry Sound.	Wheeler, J. A. McL	Tamworth.
Thomas, Griff J.		Widdifield, C. H	Pine Orchard.
Thomson, R. D	Biscotasing.	Whitmore, Edgar	Rosseau Falls.
Tait, Thomas B	Burk's Falls.	Wright, L. B	Sault Ste. Marie.
Taylor, C. M	Gravenhurst.	Ward, Joseph W	Ottawa.
Thornton, W. D	Longford Mills.	,	French River.
Trussler, Gilbert	Trout Creek.		Victoria Harbor.
Thompson, Geo. S	Lindsay.		Thessalon.
Thompson, Fred. A. H	Callander.	Wall, Patrick B	Cheboygan, Mich.
Thompson, Francis Hy	Nosbosing.	Wells, John R.	Little Current.
Train, A. C.	Rowan Mills.	Whiteside, John	Potorborough
Turgeon, Geo	Cook's Mills.	Watt, William	Lindsay.
Thayer, Wm	Sault Ste. Marie.	Wilson, George White, Thomas	
Taylor, Thos. G		Wood, William D.	Sault Ste. Marie
Trowse, A.		Watts, John J.	Fort Frances.
Tucker, Louis A.		Webster, George F	Fort Frances.
Thompson, Daniel	P'rt'ge du F'rt O	Wright Parcy	Fort Frances.
Thompson, Richard	Kenora.	Watte William R	Fort Frances.
Thompson, Joseph H		Watson, William	North Bay.
Taylor, Edward A.	Westmeath.	Wagner, Fred	Kenora.
Tait, Ralph	Arnprior.	Wainwright, Edward C	Huntsville.
Train, William	Burk's Falls.	Wilson, Wm. James	Deseronto.
Turner, Garvin F	North Bay.	Weston, Frank R	Midland.
Tilson, Joseph	Burk's Falls.	White, James B	Manitowaning.
Tuffy, John	Cartier.	Warren, Robert M	Cache Bay.
Thorpe, Thomas	Pembroke.	Wilson, George A	Balsam Hill.
Taylor, Charles E	Gravenhurst.	Welch, Harold	Milberta.
Tench, Arthur	Hekkla.	Wilson, James A., Jr	Webbwood.
Tulloch, William A	Sault Ste. Marie.	Woods, John R	Antrim.
Taylor, Alex. M	Duristown.	Wardell, Ernest C. S	Victoria Harbor.
TUHER, J. A	r rige au r''rt. Q.	Woods, Joseph F	noach's roint.

Name. P. O. Address.	Name.	P. O. Address.
Wilson, Edward	Younge, Harvey D Young, R. H Yuill, John Albert Young, William Young, A. J	Kearney. Dorset. Dorset Brownhill. Callander. Thessalon. North Lake. Fort Frances. Fort Frances. Braeside. Severn Bridge. Cache Bay. Coldwater. Young's Point. Young's Point. Arnprior. Braeside. Harvey. Arnprior. Bracebridge.

AUBREY WHITE,
Deputy Minister.

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For Year Ending 31st October

1910

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:

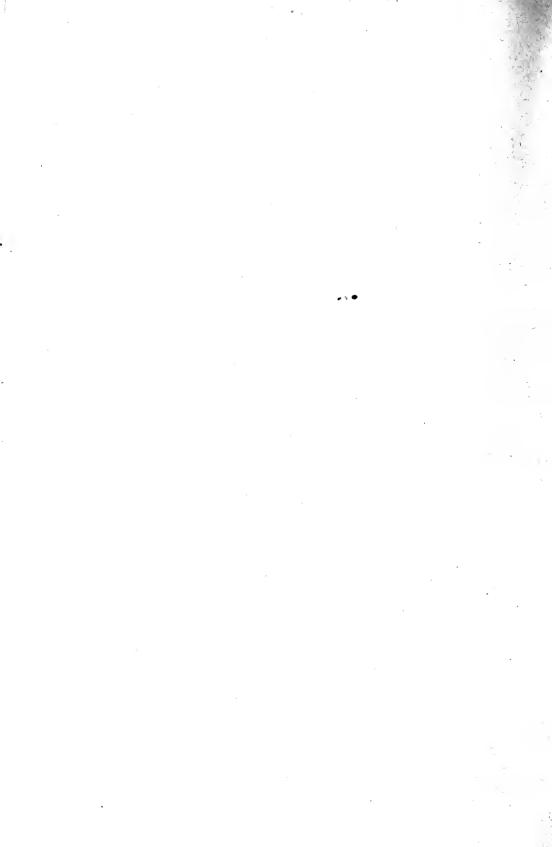
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TORONTO

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REPORT OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Year Ending 31st October, 1910.

To His Honour THE HONOURABLE J. M. GIBSON,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by law, I submit for the information of your Honour and the Legislative Assembly a report of the management of the Crown Lands of the Province for the year ending 31st October, 1910.

CLERGY LANDS.

The amount collected on account of sales of clergy lands was \$908.35. (See Appendix No. 3, page 7.)

COMMON SCHOOL LANDS.

The area of these lands sold during the year was 20½ acres for \$70.95. The collection on account of these and former sales was \$8,486.59. (See Appendix No. 3, page 7.)

GRAMMAR SCHOOL LANDS.

The area of these lands sold during the year was 16.40 acres for \$16.40. The collection on account of these and former sales was \$390.40. (See Appendix No. 3, page 7.)

- University Lands.

The area of these lands sold during the year was 4,019.95 for \$2,109.35. The collection on account of these and former sales was \$1,072,08. (See Appendix No. 3, page 7.)

CROWN LANDS.

There was sold for agricultural purposes during the year 92,560 acres for \$127,151.01. There was collected on account of these and former sales \$104,949.35. There was sold for mining purposes 17,275.94 acres for \$425,331.53. There was collected on account of these sales \$327,160.12. There was leased for mining purposes 9,028.86 acres for \$10,249.39. There was collected on account of mining leases \$29,008.79. There were 4,782.77 acres leased for other than

mining purposes and collected on account of Crown Leases \$7,469.66. The total area of lands of the Crown disposed of during the year was 127,704.48, and the total collection on account of lands sold and leased was \$479,445.34. (See Appendix No. 3, page 7.)

The Temiskaming region has continued to attract the attention of settlers. As soon as the Transcontinental Railway is in operation there will no doubt be a

large influx of people to the clay belt through which that railway runs.

The Porcupine discoveries and developments have caused considerable excitement, and large numbers of prospectors and others have been attracted to that region. The exploration and working of the mines will give employment to a great many people and create a market there for all kinds of natural products. The construction of the Porcupine Branch of the T. & N.O. Railway will not only give access to that region for mining purposes, but will open up as well a large area of land suitable for agricultural purposes.

The Department has continued and extended the system of inspection of lands taken up for settlement purposes in order to enforce the conditions of building, residence and clearing so as to prevent lands being held for speculation purposes, or the cutting of timber. Where settlement conditions are not carried out according to the regulations, the sales are cancelled, the lands resumed and again opened for sale. The knowledge that the Department intends to strictly enforce the performance of settlement conditions has had a good effect in causing people to go into residence upon their lands and remain there.

The further surveys and explorations which have been made in the clay belt have demonstrated the reasonableness of the estimates made of the area of land suitable for settlement in that immense region, which is destined to be one of the most valuable agricultural sections of the Province, capable of supporting a large population by the products of the soil, and incidentally causing manufactures and business of various kinds to spring up.

FREE GRANTS.

There are still considerable areas of land suitable for settlement available in the Free Grant districts, although in many of these districts the best land has been taken up. There is a desire on the part of many to move to the West and to the clay belt of Ontario, where the land is better and greater opportunities are available.

The Township of Wabigoon, near the Town of Dryden in the Rainy River-District, has been opened for location, and part of the Township of Ware in the Thunder Bay District. The Department is, by inspection, enforcing the performance of settlement duties and cancelling those locations where there is a default in the conditions. The Department is also endeavoring to prevent lands that are unsuitable for farming being located merely for the purpose of getting the timber. The number of locations during the year has been 1,379 for 194,760 acres, and 946 locatees have earned and obtained their patents.

MILITARY GRANTS.

The total number of Military Certificates issued to date, under I. Edward VII., cap. 6, is 13,993.

Eighty-five Location Certificates were issued this year and 300 new locations were made, bringing the total number of locations to 7,495.

Ninety Certificates were surrendered to the Crown for \$50.00 each, making a total of 3,301 disposed of in this way.

Six hundred and fifty Certificates have been applied in payment for Crown

Lands.

This, therefore, shows that 11,446 certificates have been redeemed, leaving 2.547 still outstanding.

When certificates were issued and assigned, assignees became liable to the performance of settlement duties, and this condition also applies where there was more than one military location to the mile in townships not specially opened for veteran locations.

Four hundred and thirty-four notices issued to military settlers and assignees of veterans calling upon them to show that they were in actual occupation and the nature of the duties they had performed upon the land, resulted in the cancellation of 261 locations for non-performance of conditions.

Patents were issued during the year for 1,238 locations, making a total of

3,889 patents issued to date.

THE MINING INDUSTRY.

The mining industry of the Province continues to expand. The two metals which lead in point of production are silver and nickel. The output of silver from the mines of Cobalt for the year ending 31st October, 1910, was nearly 27 million ounces. The total production of these mines since their opening in 1904 will, by 31st December, 1910, have amounted to 92 or 93 million ounces, having a value of say 50 millions of dollars. The ores of Cobalt are yet far from being exhausted, and may be expected to yield liberally for years to come.

The nickel mines of the Sudbury region have also been increasing their production, the quantity of nickel produced during the 12 months ending 31st October being about 19,000 tons, valued in the matte at \$3,860,000, in addition to about 9,400 tons of copper. The operating companies have improved their facilities for mining and smelting, and much the larger proportion of the world's supply of nickel now comes, and for several years past has come, from the mines of Ontario.

The discoveries of gold at Porcupine, noted in last year's Report, have undergone vigorous development during the year, and the results so far have encouraged the hope that the field may prove a valuable one. Shafts at various points have been sunk, and large stamp-mills for the treatment of the quartz are to be erected on the Hollinger and Dome properties. Doubtless other prospects will be similarly equipped should the indications of richness and permanency at depth be favorable. A branch of the Temiskaming & Northern Ontario Railway is to be constructed into Porcupine, and will afford the new field first-class facilities for getting in machinery and supplies.

It is a fortunate circumstance that the mineral regions of Ontario are well supplied with water-powers. So far as fuel is concerned, the evolution of a mining camp in Ontario is marked by three stages: first, that in which wood is used; second, coal; third, water-power. At the beginning of operations wood is usually abundant, but the available supply soon becomes exhausted, and the expense of bringing it from a distance makes the cost too great. Coal is then brought in by rail, but freights from Pennsylvania make it dear. The next step, should the apparent life of the camp warrant it, is to harness one or more of the numerous water-powers generally found in the vicinity, and ere long the mines and works are equipped with electrical power, at a cost of one-half or even one-third that of power

generated from coal. This has been the experience of the nickel mines at Sudbury, the silver field at Cobalt, the iron mines at Michipicoten, and the group of mineral industries in Hastings county, including pyrite and acid-making, tale, the manufacture of Portland cement, and the refining of Cobalt silver ores; not to mention the vast development of electrical power at Sault Ste. Marie and Niagara Falls.

COLLECTIONS.

The total collections of the Department from all sources for the year were \$2,951,428.58. Of this amount \$327,160.12 was derived from mining lands; \$246,529.13 from royalties; \$1,835,082.71 from woods and forests; \$143,209.59 from supplementary revenue; \$84,059.49 from mining licenses and \$109,622.99 from recording fees. (See Appendix No. 4, page 8.)

DISBURSEMENTS.

The gross expenditure of the Department for all services during the year was \$625,375.71. The principal services were: Agents' salaries and disbursements, \$49,791.94; forest ranging, \$77,503.95; fire ranging, \$128,634.05; forest reserves, \$78,245.30; mines and mining, \$21,295.80; explorations and investigations, \$17,578.55; mining recorders, \$32,597.90; surveys, \$129,338.51; veterans' commutation, \$2,050.00; refunds, \$13,587.21; parks, \$15,724.28; contingencies, \$27,594.11. (See Appendices Nos. 5 and 7, pages 10 to 34.)

WOODS AND FORESTS.

The total revenue from woods and forests for the year 1910 is \$1,835,082.71. Of this \$1,634,496.21 appears as timber dues: Deposits on account of timber sales, \$92,396.36; ground rent, \$104,326.64, and transfer bonus, \$3,863.50. It is proper to say that the item of timber dues includes approximately \$200,000 bonus as timber was cut. Had timber sales been by the mile, as formerly, this amount would have appeared under the head of bonus. Until all the accruals for the year are paid in, it is not possible to give the exact figures of bonus revenue, but if this \$200,000 is credited to bonus the fact remains that the collection of timber dues is still the largest in the history of the Department. The revenue for the year just closed is the first full year's revenue under the new system of having the financial year end on the 31st of October instead of the 31st of December, as formerly was the case. The revenue from ground rent is also the largest in the history of the Department, which is caused by the increase made in the amount of the annual ground rent payable from \$3. to \$5. per mile, which change took effect for the first time for the season of 1910-11. The charge for transfer bonus was also raised from \$3. to \$5. per mile, which sensibly increased the small revenue derived from this source. An Order-in-Council was also passed increasing the dues payable on timber when cut on those berths sold previous to 1890 from \$1. to \$1.50 per thousand feet board measure, but as this increase did not affect the cut of 1909-10 no benefit has been experienced from it this year. The revenue from bonuses was not as large as it would have been had the timber berths offered not been damaged by fire, and financial stringency prevailed, which made it necessary to make the deposits as low as possible so as to ensure competition for the damaged timber.

I pointed out in my last report that the system of issuing permits had been brought to an end, and in order that those engaged in lumbering who had invested

in large plants and mills should not have their investments wiped out, it was necessary to give them an opportunity to acquire timber at public sales in the ordinary way. The only permits now existing are on the Transcontinental Railway, where if the railway was to be built contractors had to be permitted to cut ties, etc.

During the past year very serious forest fires occurred in the territory west of Lake Superior, and a very considerable area was burnt over. A good deal of this territory had been lumbered over under authority of permit in years gone by, and the small quantity of timber remaining was not of a first quality, being rough and scattered. It was, however, important to get for the Province the money value of it. Immediately on receipt of information that fires had occurred rangers were put on to examine and estimate the territory, and surveyors were sent to define the berths so they might be offered for sale. The territory to be sold was cut up into very small berths so as to give the widest possible competition by allowing the small operator to come in. The damaged timber was sold by the thousand feet board measure. The timber being damaged and scattered, the prices were not as high as they would have been for green timber, and the licensees having large quantities of their own timber damaged which they had to take care of, the competition was not as keen as it otherwise would have been, but, having regard to all the circumstances, the sale was satisfactory.

During the past winter the cutting of timber damaged by fire in the Mississaga Forest Reserve was proceeded with under the supervision of a carefully selected staff of rangers and scalers appointed by the Department, whose count and measurements were final for revenue purposes. The considerable prices to be paid for this timber made it necessary that very close measurements should be made, and that the cutting should be carried on in an economical manner as respects the character and size of the trees to be cut, as well as making allowances for timber damaged by fire, and the other defects usually found in timber. In order to prevent disputes the cullers were required to put on the end of the log, in black chalk, the contents they allowed, so that the lumberman might see that he was getting a fair measurement, and the Crown ranger, whose business it was to check up the measurements of the cullers, might do so with readiness and thoroughness. Although there were differences of opinion between the operators and the Government scalers, they were not serious and the accounts were based on the measurements of the Department's officers. This system of measurement and supervision of cutting is now applied to all sales made by the thousand feet board measure system. It was estimated that the output for 1909-10 would be 100,000,000 feet in excess of the previous year. As a matter of fact, the output of Pine was about 142,000,000 in excess of 1908-09. The estimate for the present winter of 1910-11 is that there will be an increased output of about \$50,000,000 feet B.M.

FIRE RANGING.

During the past year an important departure was made in respect to fire ranging on licensed territory. The stumpage value of timber had greatly increased, but this increase had inured to the benefit of the timber licensees. The time seemed to have arrived when the licensees should bear the whole cost of the fire-ranging and protection of their timber. In considering the question of increasing timber dues and ground rent, the matter of the cost of fire-ranging came up, and it was understood and agreed to that the whole expense, except as regards printing literature, copies of the Fire Act. diaries, etc., should be borne by the licensees; therefore, this year, the timber licensees have borne the entire cost of

fire-ranging on licensed territory. There has, however, been no change in the supervision of the fire-ranging on licensed lands. The licensees have still to submit the number of men and the names of the fire-rangers they propose to employ, and the limits on which they are to be placed. The Department instructs the rangers as to the performance of their duties. It supplies them with literature and copies of the Fire Act,—pamphlet and poster. It clothes them with authority as Government officers; appoints them fish and game wardens, and furnishes them with diaries in which they have to enter their movements from day to day,—which diaries have to be sent in to the Department at the end of the season, verified by the affidavit of the rangers. Rangers are required to report all serious fires to the Department, as well as to the licensee. The Department requires that fire rangers shall be placed on all limits, and if the licensees fail to put them on, the Department undertakes that duty and charges the expense against the berths for which it appoints the rangers, and makes the charge a lien on the berth, which must be removed before a license will be renewed. The licensed territory is divided into districts of convenient size, for purposes of supervision, and experienced bush rangers are placed in charge of the fire rangers in each district. This superintendent has the direction and supervision of all fire rangers under his care; sees that they are placed on all limits; that they are discharging their duties properly, and generally represents the Department and the licensee. In the event of a serious fire taking place, the district ranger takes charge and directs the work of suppression, and on the fire being extinguished reports fully to the Department where the fire occurred, its cause (if it is possible to ascertain this), the quantity of timber damaged, and all other particulars. Thus it will be seen that the Department has not parted in the slightest degree with its supervision and control of the service, the sole change being that the licensees pay the expense of fire-ranging on their licensed territory.

It may here be stated that there were no forest fires of any consequence on licensed territory east of Port Arthur during the past year. The supervision was evidently close, and the result satisfactory. There is no doubt that the constant presence of fire rangers, year after year, calling attention to the danger of setting out fire, inculcating a spirit of carefulness and responsibility, and the distribution of the Fire Act and other literature, has had an educative effect, and we are now reaping the benefit of this service by immunity from serious fires during the past year.

In the region west of Port Arthur, especially in the Fort Frances district, the summer was very dry and warm. Indeed it was said to be the driest summer for a period of thirty years. No rain fell and in consequence the forest was in a highly inflammable state. Serious forest fires took place on licensed territory there and on lands of the Crown, away from settlement or railways, and large quantities of Pine timber were seriously damaged. This timber is being taken out during the present winter, as the Department notified the licensees where the damaged timber was, and directed them to cut it, intimating that in the event of their failing to do so, they would be held accountable for the loss. Every effort was made to discover the cause of these fires, but in that immense region it is most difficult to ascertain who started it, or how any particular fire was set out. During such a dry summer as the past, fires may be expected to run with great rapidity, and the throwing down of a lighted match or cigarette would be sufficient to cause a conflagration of a serious character.

The railways have been blamed for carelessness, but, though careful enquiries were made, the Department was unable to bring home to any of them any careless-

ness in connection with their engines. Curious to note some of the most serious fires that occurred, were away from railway construction, settlement, or lumbering. On the other side of the boundary line, in the State of Minnesota, serious fires occurred, entailing great loss of life, and some of them crossed into Ontario. Fortunately we experienced no loss of life, although serious damage was done to the forest. There were on duty on licensed lands, during the past season, 427 fire rangers, all paid by the timber licensees.

FOREST RESERVES.

During the summer the usual fire-ranging staffs were placed on duty in the several forest reserves:-The Temagami, Mississaga, Nepigon, Quetico and the On these reserves there were about 288 rangers on duty. Temagami Reserve, there has been great danger for some time, owing to the extensive exploring and mining for silver, which has been going on there, but during the past summer we have been fortunate enough to have escaped serious damage from fire. The explorers and miners, and summer tourists, of whom a great number visited this reserve during the summer months, appear to have exercised every care and precaution. 'At the northern end of this great reserve there has been great activity and prospecting incident to the gold discoveries which have taken place there. Next summer will no doubt see a tremendous influx of prospectors. miners and others, and we shall have to place a large staff on duty at that end of It is possible that a railway will be constructed from the T. & N. O. into Porcupine at an early date, and there is also an agitation on foot to have a railway built into Gowganda, which will be an added source of danger. If we had not had very efficient fire-ranging in that reserve since the mining excitement began, the large quantity of Pine timber growing there would, in all probability, have gone up in smoke.

There have been no fires during the year in the Mississaga, the Nepigon or the Eastern Reserves, where adequate staffs of fire rangers were maintained. great Nepigon Reserve is exposed to considerable risk, owing to the construction through the northern end of it of the Transcontinental railway. Reserve has been carefully guarded and the forest growth is reported to be dense and thrifty on this territory, which was completely denuded of its Pine timber before being set apart as a Reserve. The Sibley Reserve is a small area, covering Thunder Cape,—the object being to keep that noble promontory clothed with The Quetico Reserve, in the Rainy River No fire has occurred there. district,—the latest addition to our list of forest reserves,—suffered somewhat from forest fires during the past summer. As this reserve is away from settlement and railways, or lumbering, it was difficult to account for the fires, unless they had crossed from the Minnesota side, where serious fires raged for considerable periods. We had an adequate staff of rangers on duty in this Reserve, and every effort was made to protect it, and suppress fires when they occurred. We had to dispose of some areas in this Reserve, where the timber was seriously damaged, and it had to be cut to save its value for the Province. Serious fires occurred at other points in the Thunder Bay and Rainy River Districts. Altogether it was estimated that about one thousand miles of territory had been more or less damaged by fire. Part of this territory had been cut over some time ago under authority of permit, -some was partially cut over, and some was virgin territory. Our fire rangers had instructions to report at once to the chief rangers when fires occurred, and the chief rangers were requested to have estimates made of the damaged timber, and

the berths surveyed at the earliest possible moment, so that the timber could be advertised for sale and cut this winter, before becoming a total loss. The sale of the damaged timber, having regard to all the circumstances, was fairly satisfactory. The plain duty was to realize what we could for the Province, and this was promptly done. Some of the timber licensees had timber damaged on their own limits, which we were pressing them to cut, and consequently we had not the sharp competition for this damaged timber, that we otherwise would have had. We are expecting that the bulk of the seriously damaged timber will be cut this winter, and a further proportion next year, and that the actual waste may be kept considerably below 50,000,000 feet board measure.

RAILWAYS.

We have had large staffs of rangers along the Temiskaming and Northern Ontario, the Transcontinental, the Canadian Northern, and the Canadian Pacific. There is a very large number of men engaged in railway construction, through the northern part of the Province, from the boundary of Quebec to that of Manitoba,—a distance of nearly a thousand miles. A large percentage of this labor is foreign, with no knowledge of the laws or ways of this country,-not speaking English,—with no care or thought about the danger of using fire during the dry season, and yet constantly using it for a variety of purposes, -cooking, smudges, smoking and in other ways. The only hope of preventing this line of railway construction becoming a belt of fire, was by placing fire rangers along it, who constantly brought before the people employed the necessity for caution in the use of fire and extinguishing it when it had served its immediate purpose. The penalty of the law for neglect of care was also kept before these people, and the railway engineers, contractors and foremen, and all who were in authority were urged to keep before the labor element the danger from forest fires, and what they should do to prevent them. The presence of these fire rangers patrolling the line every day, kept their duty ever present to the railway authorities, and had an otherwise good effect upon the labor employed. If there had been no rangers there, fire would have been constantly, freely and dangerously used, and the forest alongside that road for a thousand miles would have become a waste.

There is a splendid spruce forest all along this line, capable of producing great traffic for the railway, inducing the erection of pulp and paper mills, and affording employment to thousands of people, who will, in the near future, find happy and prosperous homes in that great clay belt. It will require great effort and considerable expense to protect this timber, but it will well re-pay all the

money spent for this purpose, if the timber is preserved.

The railways have been blamed as a prolific cause of forest fires. That railway construction causes forest destruction needs no argument, for the evidence in the back parts of the Province to those travelling through it, is plain to the eye. The authorities of all the great railways have assured the Department, time and again, that they are making every effort to prevent fires along their lines, and there is no doubt that this is true, as their property and public life are endangered by the occurrence of forest fires along lines of railway. The tremendous interest that has, for the past few years, been taken in the protection of the forest from destruction by fire, has no doubt spurred them on to every effort to prevent fires along their lines, and we may hope for more care, and a better state of affairs in the future.

The Conservation Commission of the Dominion is taking the matter up with a view to obtaining stringent legislation, to compel railways to exercise greater care,

and use better appliances than they have done in the past. We had about 200 fire rangers on duty along the various railway lines during the past summer. A proportion of the cost of these rangers was borne by the railways and a proportion

by the Department.

The whole fire ranging staff on duty last summer on licensed lands, forest reserves, railways and Crown territory aggregated nearly one thousand men. It is a difficult matter, at the season of the year when fire rangers are most required, to obtain a number of well skilled bush men, who are educated and otherwise wellequipped for this work. In the early part of the summer, such men are still employed by the lumber companies in driving the streams, and again in the months of August and September, lumbering operations are beginning for the ensuing winter, and such men are looking for a winter's employment and will not stay on fire ranging when they can get better wages, and be sure of several months steady work. The Department has had to select a portion of its staff from other sources, and it has drawn upon the body of students at the School of Practical Science, at the University, and elsewhere for some of its fire rangers. These students are active men with some scientific training and give fairly good service, as soon as they get a little experience. If the Department could get thoroughly educated bush men with the necessary education and judgment, it would employ them to the exclusion of all others, but not being able to do that, it makes the next best selection possible. The men selected are put under competent chiefs, who fully instruct them in their work and see that they perform it. The greatest care is exercised in picking out the men best qualified for the position from those who apply. Higher attainments are being required each year, and stricter conditions enforced.

CULLERS' EXAMINATIONS.

Cullers' Examinations were held at North Bay, Kenora, Fort Frances and Port Arthur. Thirty candidates were successful at these examinations and were granted certificates, authorizing them to act as cullers.

(For list of cullers, see Appendix No. 37, page 104).

CROWN SURVEYS.

The following Crown Surveys have been undertaken this year:—
Instructions for sub-division of four townships were issued, namely:—

District of Sudbury, township of Machin, and part of the township of Alexandra, District of Nipissing, residue of the townships of Maisonville and Benoit.

Instructions were also issued to survey the islands in the Georgian Bay, in front of the townships of Harrison, Shawanaga, Conger, Wallbridge, McDougall, Carling, etc.

Instructions also issued for a number of base and meridian lines and township outlines in the districts of Algoma, Nipissing, Sudbury, Kenora, Mississaga Forest Reserve and Temagami Forest Reserve.

The base and meridian lines were in the district of Algoma and there were 163 miles run.

Survey of outlines of townships in the districts of Sudbury, Nipissing, Kenora, Mississaga Forest Reserve and Temagami Forest Reserve, 1,119 miles run.

A number of timber berths in the districts of Kenora and Thunder Bay have

also been surveyed during the year.

The survey of the town plots at Superior Junction and Redditt, district of Kenora, and town plot at Missanabie, district of Algoma, have also been completed.

Several other minor surveys have been performed.

The reports of the surveyors so far as received and examined will be found in Appendices 16 to 33 inclusive, pages 47 to 97 inclusive.

MUNICIPAL SURVEYS.

On the petitions of the county council of Carleton instructions were issued to survey the town line between the townships of Nepean and North Gower. Of the city of Hamilton, instructions have been issued to survey certain concession road allowances formerly in the township of Barton, now in the city of Hamilton. Of the united counties of Stormont, Dundas and Glengarry to survey the boundary road allowance between the townships of Osnabruck and Cornwall. Of the municipal council of the township of Nepean to survey the original road allowance between lot 30, concession 2, Ottawa front, and lots lettered J, K, L, M and N, concession A, Rideau front, in the township of Nepean.

The following municipal surveys have been confirmed under the provisions of the Revised Statutes of Ontario, 1897, chapter 181, sections 14 and 15, such surveys being final and conclusive. Part of the line between the township of Waterloo and the township of Guelph. The original road allowance between the broken front and the 1st concession of the township of Barton. The lines of the streets in the town of Niagara. Concession road allowance between the 10th and 11th concessions of Winchester. The southern boundary of the town of Niagara. The boundary lines of McArthur Ave. through the village of Eastview in the township of Gloucester. The side road between lots 9 and 10 in the 12th concession of the township of Nottawasaga. The concession line between the 8th and 9th concessions of the township of Hinchinbrooke from lot 12 south to lot 8.

Particulars relating to these surveys will be found in Appendices No. 14 and 15, pages 44 to 46.

MINING AND OTHER SURVEYS.

The Mining Act of Ontario requires that applicants to purchase or lease mining lands in unsurveyed territory shall file in the Department surveyor's plans (in triplicate) of the proposed mining claims with field notes and description by metes and bounds, before any sale or lease can be carried out, and under Orders-in-Council, dated February 26th, 1906, 2nd October, 1907, 7th November, 1907, applicants to purchase islands, or locations for pleasure and summer resorts or for agricultural purposes in unsurveyed territory, are required to file surveyor's plans (in triplicate) of their islands or locations as the case may be, with field notes and descriptions by metes and bounds, together with the necessary affidavits as to there being no adverse claim by occupation or improvement, etc.

Under the above Act, Orders-in-Council and Regulations in the districts of Parry Sound, Nipissing, Sudbury, Algoma, Thunder Bay, Rainy River and Kenora, an area of 28,793.28 acres has been sold and patented during the year, for which the sum of \$172,851.69 has been received, and an area of 7,550.83 acres has been

leased for the sum of \$8,180.17 as the first year's rental.

F. COCHRANE.

Minister.

Department of Lands, Forests and Mines. Toronto, October 31st, 1910.

APPENDICES

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1910.

Remarks.	Resigned August 31st, 1910.			
Salary per annum.	\$ c. 6,000 00 2,600 00 2,000 00 1,750 00 600 00	2,100 00 1,500 00 1,150 00 1,150 00 1,150 00 950 00 700 00 675 00 625 00	1,750 00 950 00 575 00 600 00	2,500 00 1,200 1,400 1,100 1,100 1,050 1,0
When appointed.	1905, May 13. 1882, Jan. 1. 1872, Feb. 1. 1899, Feb. 26. 1889, May 1. 1905, Jan. 1.	1872, May 1. 1903, March 6. 1894, Feb. 5. 1903, Jan. 1. 1907, March 13. 1909, March 24. 1909, March 24. 1896, Oct. 23. 1907, Jan. 16.	1900, March 2 1904, Jan. 13 1909, March 24 1904, Nov. 9	1866, Jan. 30 1892, Sept. 1 1909, May 1 1872, Feb. 5 1897, Sept. 27 1904, Jan. 15 1904, Jan. 15 1907, March 13 1909, March 24
Designation.	Minister Deputy Minister Law Clerk Minister's Secretary Secretary to Department Stenographer do	Chief Clerk Clerk do do do do do do do do do do do do do	Chief Clerk	Director, of Surveys Surveyor and Draughtsman. Ass't Surveyor & Draughtsm'n Clerk Draughtsman do Draughtsman do do do do
Name.	Hon. F. Cochrane Aubrey White George Kennedy George W. Yates E. S. Williamson Janet Garvie M. M. McCrea.	J. J. Murphy Walter C. Cain W. R. Ledger Selby Draper S. A. Platt F. Lucas F. Samuels May Bengough Jean C. Oram	R. H. Browne R. T. Winter E. M. Browne E. F. O'Neil	G. B. Kirkpatrick J. F. Whitson L. V. Rorke W. F. Lewis D. G. Boyd E. M. Jarvis J. B. Proctor H. Treeby F. C. Blanchet J. L. Byrne Alexander Leaman
Branch.	1	Sales and Free	Military Grants. $\left\{\right.$	Surveys and Patents

2 г.м.

•			
•	Died January 10th, 1910.	v	
625 00 575 00 1,850 00 1,150 00 1,150 00 1,050 00 900 00	2,100 00 1,350 00 1,500 00 1,500 00 1,000 00 1,000 00 1,000 00 800 00 800 00 700 00 600 00 600 00 600 00	2,300 00 1,260 00 1,300 00 1,050 00 950 00 1,500 00 950 00	3,250 00 1,100 00 950 00 950 00 950 00 950 00 950 00
1904, Nov. 23	1867, Dec. 1. 1891, Nov. 1 1898, Aug. 1 1900, April 9. 1903, March 6. 1904, Jan. 13. 1904, Nav. 23. 1907, March 13. 1907, March 24. 1909, March 24. 1909, March 24. 1909, March 24. 1909, March 24. 1909, March 24. 1909, March 24.	1861, April 15 1873, Dec. 20 1904, Jan. 13 1907, March 13 1907, March 13 1907, March 13 1907, March 13	1891, June 19 1907, March 13 1907, March 13 1908, April 8 1908, April 8 1901, March 1
Stenographer do Chief Clerk Clerk Clerk do do do	Chief Clerk Clerk Clerk do do do do do do do do do do do do do	Accountant Clerk do do do do do do Registrar Clerk	Deputy Minister Secretary Clerk do do do do do do do
M. H. Kirkland E. G. Halliday C. S. Jones C. E. Burns W. S. Sutherland W. Carrell A. E. Robillard A. E. Roe	J. A. G. Crozler Kenneth Miller J. B. Cook H. Gillard F. J. Niven W. F. Trivett R. H. Hodgson John Houser A. J. Lamb A. J. Lamb G. W. Harris S. D. Meeking Florence Lennon Amy Thompson Mary E. Bliss	D. George Ross E. Leigh H. M. Lount H. E. Johnston H. G. Harris C. J. Clarke Frank Yeigh Chester Dies	Thomas W. Gibson R. D. Fisher W. H. Morris R. A. Sinclair W. Lemoine A. Burritt Anne Moffatt D. H. Barr
	oods and Forests	counts	reau of Mines.

Appendix No. 1.—Continued.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1910.

Remarks.		
Salary per annum.	850 00 800 00 675 00 625 00 750 00	AUBREY WHITE,
When appointed.	1909, March 24 1910. April 14 1906, May 16 1907, March 13 1909, March 24	AUBRE
Designation,	Clerk. do Stenographer do do do Messenger	
Name.	A. G. Scovill Clerk 1909, March 24.	SS,
Branch.	Bureau of Mines.	D. GEO. ROSS,

AUBREY WHITE, Deputy Minister Lands and Forests.

Accountant.

Appendix No. 2.

List of Land Agents and Homestead Inspectors for the year ending October 31st. 1910.

	1
Remarks.	Died June 25th, 1910.
Salary per annum.	\$\\ \frac{1}{1},\frac{2}{2}00 00 \\ \frac{1}{2}00 \\ \frac{1}200
Date of appointment.	1907, Oct. 1. 1906, Nov. 23 1906, Nov. 23 1905, July 28 1905, July 28 1905, Nov. 15 1906, Nov. 15 1908, Jun. 8 1909, Jun. 8 1909, Jun. 8 1909, Jun. 8 1909, July 10 1908, July 20 1909, May 21 1905, Nov. 10 1905, Nov. 10 1905, July 20 1905, July 20 1906, May 7 1892, Oct. 12 1906, May 7 1906, July 29 1907, Oct. 30 1908, July 29 1907, Oct. 30 1908, July 3 1907, Sept. 13 1907, Sept. 13 1907, Sept. 13 1906, May 7 1906, May
District or county.	Part of Victoria Homestead Inspector Fart of Frontenac and Addington Homestead Inspector and Crown Land Agent ao do Algoma Homestead Inspector Fart of District of Rainy River do Mylissing Homestead Inspector Part of District of Nipissing Homestead Inspector Part of District of Parry Sound do District of Parry Sound do District of Parry Sound do Alberta and part of District of Rainy River Homestead Inspector Town Plot of Alberta and part of District of Rainy River do do Rainy River do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do do Sudbury do Hainy River Homestead Inspector District of Rainy River Homestead Inspector District of Rainy River Homestead Inspector
Post office address.	Minden Fort Frances Denbigh Bracebridge Massey Thessalon Parry Sound Stratton Station Cochrane New Liskeard Matheson Sault Ste. Marie. Apsley Powassan Maganetawan New Liskeard Chelmsford Fort Frances Murillo Mattawa Emsdale Fort Arthur Blezard Valley Sturgeon Falls Parry Sound Wilho Dryden Sturgeon Falls Dryden
Лаше.	Baker, R. H. Barr, James Both, Charles Brown, J. B. Byers, R. J. Buchanan, T. Buchanan, T. Campbell, W. Campbell, T. Chester, T. Chid, F. A. Dean, Thomas Eastland, T. G. Ellis, H. J. Freeborn, Dr. J. S. Grills, J. J. Groulx, R. J. Hughes, Thomas Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenks, James Jenkin, William Keefer, H. A. Lemieux, J. A. RacLennan, J. K. MacLennan, J. K. Parsons, W. J. Parsons, W. J. Parnce, Adam Pronger, R. H.

Appendix No. 2.—Continued.

List of Land Agents and Homestead Inspectors for the year ending October 31st, 1910.—Continued.

Remarks.	per day while employed. Also Mining Recorder.
Salary per annum.	300 00 300 00 500 00 400 00 150 00 150 00 250 00 250 00 500 00 500 00
Date of appointment.	1909, March 1 1909, June 18 1900, Sept. 21 1900, Sept. 21 1906, May 31 1906, May 31 1906, July 4 1906, April 7 1906, April 7
District or county.	Marie. Part of District of Algoma. Homestead Inspector Part of District of Nipissing do do Rainy River Part of Hastings. do Peterboro do Peterboro do District of Sudbury. do St. Joseph Island. Homestead Inspector Part of District of Nipissing.
Post office address.	Sault Ste. Marie. Kenora Mattawa Kenora L'Amable Kinmount Pembroke Warren Marksville Englehart
Name.	Rothwell, B. J. Sault Ste. M. Smith, James Mattawa Shall, Robert Kenora Tait, J. R. L. L'Amable Wilson, James Kinmount Wright, E. A. Warren Whybourne, W. E. Marksville Watson, T. P. Englehart Woollings, J. Englehart

AUBREY WHITE, Deputy Minister Lands and Forests.

Accountant.

D. GEO. ROSS

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections for the year ending October 31st, 1910.

Service.	Acres sold and leased.	Amount sales ar leases	nd	Collection on sales and lease	5
Orown Lands:		\$	c.	\$	c.
Agricultural	92,560.06	127,151	01	104,949	35
Mining	17,275.94	425,331	53	327,160	12
Clergy Lands				908	35
Common School Lands	20.50	70	95	8,486	5 9
Grammar School Lands	16.40	16	40	390	40
University Lands	4,019.95	2,109	35	1,072	08
Leases:					
Mining	9,028.86	10,249	39	29,008	79
Crown	4,782.77	1,571	00	7,469	66
	127,704.48	\$566,499	63	.\$479,445	34

D. GEO. ROSS. Accountant.

AUBREY WHITE, Deputy Minister Lands and Forests.

Appendix No. 4.

Statement of Revenue of the Department of Lands, Forests and Mines for the year ending October 31st, 1910.

Service.	\$	c.	\$	c.	\$	c.
LAND COLLECTIONS.	- 1					
Crown Lands:						
Agricultural	104,949	35				
Mining	327,160					
Clergy Lands			432,109	47		
Common School Lands	908 8,486		•			
Grammar School Lands	390			٠ ا		
University Lands	1,072	08				
Rent:			10,857	42		
Mining Leases	29,008	79				
Crown Leases	7,469					
	04.050		36,478	45		
Mining Licenses	84,059 109,622					
Recording Fees	103,022		193,682	48		
Royalties	246,529					
Provincial Mines	549	77	047 070	00		
Supplementary Revenue;			247,078	90		
Acreage Tax	15,394	14				
Profit Tax	120,687	54				
Gas Tax	7,127	91		50		
Woods and Forests.			143,209		1,063,416	31
D			00.000	00		
Bonus			92,396 1,634,496			
Ground Rent			104,326			
Transfer Fees			3,863		4 005 000	
December 1 Access Wood	900	\ 91			1,835,082	71
Provincial Assay Fees	1.420) 21) 64				
Cullers' Fees		00				
	F 05/	- 00	2,694	85		
Rondeau Park	5,256 3,806	0 UU 3 25	.1			
Algonquin Park		50				
			9,992	7 5	40.00	
Refunds.					12,687	60
Bureau of Mines			4	00		
Wood Ranging			4,372			
Fire Ranging			29,553	80		
Diamond Drill			5,671	82 00		
Special Services and Unforeseen Expenses			390			
Agents' Salaries			81	50		
Mining Recorders				00		
Exploration and Estimation of Timber Berths Special Surveys in Mining Districts				20 95		
Commissions re Sundry Investigations				70		
	1					
	1				40,241	96

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year ending October 31st, 1910, which are considered as Special Funds.

Service.	\$ c.	\$ c.
Clergy Lands. Principal Interest	420 73 487 62	908 35
Common School Lands. Principal Interest	2,707 69 5,778 90	8,486 59
Grammar School Lands. Principal Interest	171 15 219 25	- 390 40
University Lands. Principal. Interest	904 90 167 18	- 1,072 08 \$10,857 42

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines for the year ending October 31st, 1910.

Service. \$ c. \$ c \$ c.						
Land. 350 00	Service.	\$	c.	* c	, \$ c.	
Baker, R. H. 350 00 Both, Charles 100 00 Brown, J. B. 900 00 Buchanan, Thomas 300 00 Byers, R. J. 500 00 Campbell, J. G. 500 00 Campbell, William 500 00 Child, F. A. 500 00 Eastland, T. G. 300 00 Eastland,	Agents' Salaries.					
Both, Charles	Land.			1		
McRayden, Alex 500 00 MacLennan, J. K. 500 00 500	Both, Charles Brown, J. B. Buchanan, Thomas Byers, R. J. Campbell, J. G. Campbell, William Child, F. A. Eastland, T. G. Ellis, H. J. Freeborne, J. S. Grills, J. J. Hollands, C. J. Jenks, James Jenkin, William Small, R. Keefer, H. A.	100 900 300 500 500 500 500 500 500 500 500 5	0 00 0 00 0 00 0 00 0 00 0 00 0 00 0 0			
Christie, W. P. 1,600 00 Hawkins, S. J. 1,400 00 Henderson, Charles 1,600 00 Howie, R. J. 1,100 00 Johnson, S. M. 1,600 00 McDonald, Hector 1,400 00 McDougall, James T. 1,600 00 Margach, William 1,600 00 Maughan, Joseph 1,400 00 Oliver, J. A. 1,500 00 Stevenson, A. 1,400 00 Watts, George 1,270 00 MacDonald, S. C. 133 33 Homestead Inspectors. 17,603 33 Homestead Inspectors. 17,200 00 Burnes, C. W. 900 00 Chester, Thomas 1,200 00 Dean, Thomas 600 00	Lemieux, J. A. McFayden, Alex MacLennan, J. K. Parsons, J. W. Phillon, J. A. Powell, F. R. Prince, Adam Pronger, R. H. Rothwell, B. J. Spry, W. L. Tait, J. R. Warren, D. B. Whybourne, W. E. Wilson, James Woollings, Joseph Wright, E. A.	400 500 500 500 500 500 500 366 300 360 500 255 156	0 00 0 00 0 00 0 00 0 00 0 00 0 00 0 0	13,876 95		
Burnes, C. W. 900 00 Chester, Thomas 1,200 00 Dean, Thomas 600 00	Christie, W. P. Hawkins, S. J. Henderson, Charles Howie, R. J. Johnson, S. M. McDonald, Hector McDougall, James T. Margach, William Maughan, Joseph Oliver, J. A. Stevenson, A. Watts, George MacDonald, S. C. Homestead Inspectors.	1,400 1,600 1,100 1,400 1,400 1,500 1,400 1,270 133	0 00 0 00 0 00 0 00 0 00 0 00 0 00 0 0	- 17,603 33		
Carried forward 3,900 00 31,480 28	Burnes, C. W	900 1,200	00 00			
	Carried forward	3,900	00	31,480 28		

Service.	\$ c.	\$ c.	\$ c.
Brought forward	3,900 00	31,480 28	
Agents' Salaries.—Concluded.			
Homestead Inspectors.—Concluded.			
Groulx, R. J. Hughes, Thomas Quenneville, I. Smith, James Watson, T. P.	600 00 600 00 600 00 228 00 912 50	6,840 50	
AGENTS' DISBURSEMENTS.		0,040 50	
Land.			
Baker, R. H. Brown, J. B. Buchanan, Thomas Byers, R. J. Campbell, J. G. Campbell, William Child, F. A. Freeborne, J. S. Grills, J. J. Jenkin, William Keefer, H. A. McFayden, A. Parsons, W. J. Phillon, J. A. Powell, F. R. Prince, Adam Pronger, R. H. Spry, W. L. Warren, D. B. Woollings, Joseph	11 75 10 74 14 00 15 50 30 15 609 80 2 50		
Timber.		1,137 71	
Christie, W. P. Hawkins, S. J. Henderson, Charles Howie, R. J. Johnson, S. M. McDonald, Hector McDougall, J. T. Margach, William Maughan, J. Oliver, J. A. Stevenson, A. Watts, George	402 06 560 90 341 61 210 40 361 60 345 00 2,273 26 541 95 1,360 33 592 12		
Homestead Inspectors.		7,980 55	
Barr, James Burnes, C. W. Chester, Thomas Dean, Thomas Groulx, R. J. Hughes, Thomas Quenneville, I. Smith, James Watson, T. P.	525 13 213 47 11 00 197 75 175 65 31 75 240 50	2 150 00	
		2,150 00	
Carried forward	.]	. 49,589 04	

Service.	\$	c.	\$	c.	\$ c.
Brought forward			49,589	04	
Agents' Disbursements.—Concluded.					
Miscellaneous.				:	
Ames, D. H., Caretaker Islands in Dog and Loughborough Lakes	20	00			•
Black, W. D., Inspection E. ½ 13 in 13, Sheffield Bilton, George, Caretaker of Islands in Mud and		00			
Loon Lakes Campbell, R. S., Inspection 4 in 10, Montague		00 00			
Davis, Samuel, Caretaker of Islands in Leonard Lake Guthrie, William, Caretaker of Islands in Devil's	20	00			
LakeLee, J. B., Inspection of Gravel Pit		50 65			
Langworthy & McComber, Valuating Railway Reserve	25	00			
Marchildon, Thomas, Inspection of 17 and 18 in 20, Tiny		00			
Pyke, B. J., Inspection of lots in Warwick Sheppard, H. E., Inspection of Road Houses		25 50	202	90	49,791 94
OTTAWA.					49,791 94
Darby, E. J., Agent			1,500 1,000		
Rent Disbursements		00 02	412	02	
Wood Ranging.					2,912 02
Allen, R. A			1,550 1,260		
Ansley, W. E.			850	00	
Arnill, William Aylward, James			815 750		
Barrett, Thomas		00 45			
Bates, Robert			1,304 424		
Baulk, G. R			304 584		
Binnie, Thos			268	00	
Bliss, C. L. Bliss, L. E.	780		348	00	
Disbursements	60		040	70	
Buie, D.			840 85		
Buisson, William	• • • • • •		610		
Burd, J. H				00 40	
Carter, George		1	795	00	
Castonguay, A. C		,	950 564		
Chenier, D. A			855	00	
Clark, D			240 604		
Corrigan, R. T.			1,185		
Coyne, P			875		
Daniels, R			402 440		
2101110, 21 1111111111111111111111111111					

Service.	\$ c.	\$ c.	\$ c.
Brought forward		16,986 05	52,703 96
Wood Ranging.—Continued.			
Didier, H		695 00	
Doyle, T		205 00 36 60	
Dougherty, G. M		165 00	
Dougherty, J. P		75 00 196 00	
Oupuis, A		1,350 00	
Duval. C. A		395 00	
Ferguson, A. E.		815 00	
Fisher, George	785 00	725 00	
Disbursements			
		836 65	
Foster, E. G		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Fraser, W. A		705 00	
Gorman, J. P	912 12		
Disbursements	60 25	, 972 37	
Greer, S. H		725 00	
Hart, J. I		700 00	
Hartley, C.		1,180 00	
Hatch, J. W		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Huckson, A. H.		1,160 00	
Humphreys, John		396 00	
Hurdman, W. H		730 00 725 00	
Irving, Ed.		636 00	
Irwin, C. W		56 25	
Johnson, R. E		784 00 775 00	*
Lee, J. B		404 00	
Legris, John		660 00	
Londry, W. E		405 38	
Long, H. E. Macdonell, R. D.		710 00 685 00	
McAuley, W. D		734 23	
McDonald, A. J			
Disbursements	137_60	1,373 60	
McDonald, H		5 00	
McDonald, Thomas	•• ••••	250 00	
McDonald, J. A., Estate		151 65 504 00	
McCaw, John		1,475 00	
McGillivray, D. D		680 00	
McGregor, C. F	• • • • • • • • • • • • • • • • • • • •	280 00	
McLeod, W. A		488 00 815 00	
McNabb. Alex		905 00	
McNabb, A. D	• • • • • • • • • • • • • • • • • • •	261 54	
McWhinney, F. H		1,170 00 488 00	
Manice. W		1,300 00	
Margach, J. A		150 00	
Margach, William, Disbursements	• • • • • • • • • • • • • • • • • • • •	182 60 810 00	
		li_	
. Carried forward	1	48,666 09	52,703 9

Service. \$ c. \$ c. \$ c. \$ c. \$ c. \$ c. \$ c. \$	11			
Wood Randing.—Continued. 500 00 Matheson, William 500 00 Miller, William 108 00 Disbursements 3 20 Milway, J. H. 1,370 00 Molyneaux, G. 730 00 Morley, Charles 500 00 Morley, Charles 500 00 Murrow, William 1,410 00 Disbursements 39 50 Nash, John 248 00 Nevison, W. H. 496 00 Nilver, J. A. 78 3 Pul, C. A. 781 34 Pigott, J. A. 78 3 Purdy, John 590 00 Disbursements 43 80 Pender, D. 730 00 Porter, H. 86 00 Disbursements 43 80 Purdy, John 590 00 Revell, L. O. 215 00 Revell, L. O. 215 00 Revell, L. O. 83 00 Rogers, F. W. 85 00 Shoudice, John 111 00 Disbursements 110 Simmon, M. G.	Service.	\$ c.	\$ c.	\$ c.
Matheson, William 500 00 Menzles, Alex. 1,160 00 Miller, William 108 00 Disbursements 3 20 Milway, J. H. 1,370 00 Molyneaux, G. 730 00 Morley, Charles 500 00 Morley, Charles 500 00 Murrow, William 1,410 00 Disbursements 39 50 Nash, John 248 00 Nevison, W. H. 496 00 Nilvet, James 1,025 00 Oliver, J. A. 75 8 Paul, C. A. 781 34 Pigott, J. A. 940 00 Pender, D. 730 00 Porter, H. 86 00 Disbursements 43 80 Purdy, John 590 00 Revell, L. O. 215 00 Ridley, Robert 830 00 Rogers, F. W. 85 00 Rusk, Oscar 1,065 00 Shedt, F. 400 00 Shouldice, John 111 00 Disbursements 11 00 Simmon, William	Brought forward		48,666 09	52,703 96
Menzles, Alex. 1,160 00	Wood Ranging.—Continued.			
Milway, J. H.	Menzies, Alex	108 00		
Nash, John 248 00 Nevison, W. H. 496 00 Niblet, James 1,025 00 Oliver, J. A. 758 Paul, C. A. 781 34 Pigott, J. A. 940 00 Pender, D. 730 00 Porter, H. 86 00 Disbursements 43 80 Purdy, John 590 00 Revell, L. O. 215 00 Ridley, Robert 830 00 Rogers, F. W. 85 00 Rusk, Oscar 1,065 00 Scott, W. W. 60 00 Shaids, F. 855 00 Short, James 224 00 Short, James 224 00 Short, James 152 00 Simmons, A. G. 800 00 Simpson, William 685 00 Smith, J. D. C. 945 00 Disbursements 178 05 Spearman, Thomas 70 00 Sproule, N. 335 00 Stuart, John 360 00 Strare, A. M. 400 00 Thompson, George S. 905 00 Thompson, George S. 905 00	Milway, J. H. Molyneaux, G. Morley, Charles Morley, F. W. Mulroney, W. J. & G. Murray, William	1,410 00	1,370 00 730 00 500 00 132 00	
Purdy, John 590 00 Reveil, L. O. 215 00 Ridley, Robert 830 00 Rogers, F. W. 85 00 Rusk, Oscar 1,065 00 Scott, W. W. 60 00 Shaw, Alfred 835 00 Shields, F. 400 00 Shouldice, John 111 00 Disbursements 41 00 Simmons, A. G. 800 00 Simpson, William 685 00 Smith, J. D. C. 945 00 Disbursements 1,123 05 Spearman, Thomas 70 00 Sproule, N. 395 00 Stuart, John 360 00 Strave, A. M. 400 00 Thompson, George S. 905 00 Thompson, V. B. 335 00 Thompson, I. E. 105 76 Tucker, L. A. 356 00 Urquhart, A. 970 00 Vincent, H. T. 1,305 00 Watts, George, Disbursements 8 80 Webster, H. R. 264 00 Webster, H. R. 265 00 <	Nevison, W. H. Niblet, James Oliver, J. A. Paul, C. A. Pigott, J. A. Pender, D. Porter, H.	86 00	248 00 496 00 1,025 00 7 58 781 34 940 00	
Simmons, A. G. 800 00 Simpson, William 685 00 Smith, J. D. C. 945 00 Disbursements 178 05 Spearman, Thomas 70 00 Sproule, N. 395 00 Stuart, John 360 00 Strave, A. M. 400 00 Thompson, George S. 905 00 Thompson, W. B. 335 00 Thompson, I. E. 105 76 Tucker, L. A. 356 00 Urquhart, A 970 00 Vincent, H. T. 1,305 00 Wagner, F. 610 00 Ward, James 365 00 Watts, George, Disbursements 8 80 Webster, H. R. 264 00 Whelan, P. J. 1,585 00 White, A. T. 265 00 Wilkins, C. H. 240 00 Wilkins, G. N. 690 00	Purdy, John Revell, L. O. Ridley, Robert Rogers, F. W. Rusk, Oscar Scott, W. W. Shaw, Alfred Shields, F. Shortt, James Shouldice, John	111 00	590 00 215 00 830 00 85 00 1,065 00 60 00 835 00 400 00	
1,123 05 70 00 Sproule, N.	Simmons, A. G. Simpson, William Smith, J. D. C.	945 00	800 00	
	Spearman, Thomas Sproule, N. Stuart, John Strave, A. M. Thompson, George S. Thompson, W. B. Thompson, I. E. Tucker, L. A. Urquhart, A Vincent, H. T. Wagner, F. Ward, James Watts, George, Disbursements Webster, H. R. Whelan, P. J. White, A. T. Wilkins, C. H.		70 00 395 00 360 00 400 00 905 00 335 00 105 76 356 00 970 00 1,305 00 610 00 365 00 8 80 264 00 1,585 00 265 00 240 00	
			75,278 22	52,703 96

		1		
Service.	\$ c.	\$	c.	\$ c.
Brought forward		75,278	22	52,703 96
Wood RANGING.—Concluded.				
Wilson, F. G. Wood, W. D. Yuill, T.		. 931	00 73 00	77,503 95
EXPLORATION AND ESTIMATION OF TIMBER BERTHS.				
Burns, William, Disbursements Fraser, Duncan Kennedy, W. C. Disbursements	308 00	. 200	40 00	
McCreight, John Margach, William Henderson, Charles Disbursements	250 00	. 594 . 513	61 45 18	
Thompson, W. B. Disbursements		1,171	75 45	
Taylor, John		. 25	40	
ESTIMATING TEMAGAMI RESERVE.				3,633 24
6				
Kennedy, W. C. Disbursements		174	76	552 76
FIRE RANGING.				
Acton, M. M		301	. 50	
Adam, Alex. Adams, Arthur 1909 Alison, M. B. 1909 Ambrose, A. W. 1909 Anderson, Frank 1909 Anger, Leon 1909 Archambault, G. 1909 Archer, John 1909 Archer, George 1909 Armstrong, D. J. Disbursements	77 50	131 422 131 131 387 335 285	50 00 50 50 00 00 60 60 60 60 60 60 60	
Armstrong, T. C. Arnott, George		. 395 . 87	00 00 00 00	
Baker, Herbert Baird, James McC. Baird, S. Barrett and Sargeant Barry, H. Bates, R. Baumann, Theo. 1909		. 382 287 . 62 . 9 . 280 . 277	00 50 50 00 00 00 50	
Carried forward		4,912	00	134,393 91

• •			
Service.	\$ c.	\$ c.	\$ c.
Brought forward	,	4,912 00	134,393 91
FIRE RANGING.—Continued.			
Beys, Morgan		405 00	
Beaton, W. H		131 00 131 00	
Belanger, E		297 50	
Bell, Thomas1909		82 00	
Bellow, Louis		. 131 00 79 00	
Bentham, William		412 50	
Bernard, Michael1909		77 00	
Binnette, J. Bird, John1909		44 00	-
Birmingham, E. A.	90 00	131 00	
Disbursements	25 95		
Bisalllon, J	415.00	115 95	
Disbursements	415 00 152 61		
		567 61	
Bisaillon, J. H.	1,285 00	1	
Disbursements	57 40	1,342 40	
Bliss, L. E	1,141 55	1,042 40	
Disbursements	513 59		
Brasher, S. M		1,655 14 397 50	_
Brazeau, O		382 50	
Breadon, H. M		320 00	
Brenchley, J	• • • • • • • • • • • • • • • • • • • •	29 15	
Brignall, W. M		280 00 65 00	
Brown, Henry1909		131 00	
Brown, Thomas		387 50	
Brown, T. E	• • • • • • • • • • • • • • • • • • • •	382 50 425 00	
Brunet, Alphonse		402 50	
Brogden, Lawrence		45 00	
Buchanan, Robt. F		382 50 327 50	
Boivin, Joseph		270 00	
Boldt, A		432 50	
Bookout, H	• • • • • • • • • • • • • • • • • • • •	380 00 24 50	
Booth, J. R1909		2 00	
Borron, Arthur1909		109 50	
Bouchard, Nicholas	• • • • • • • • • • • • • • • • • • • •	412 50	
Bourgard, Adolphe		131 00 132 00	
Bouchey, Arthur		97 00	
Boyd, John1909		83 00	
Boyd Lumber Co		124 00	
Brannan, W. H1909		87 00	
Burns, Walter		485 60	
Burron, E. M		131 00 375 00	
Cahill, James		257 50	
• •• ••		125 00	
Campbell, Duncan		400 00 320 00	
Carried forward		18,851 73	134,393 9 1

Service.	\$ c.	\$ c.	\$ c.
Brought forward		. 18,851 73	134,393 91
FIRE RANGING.—Continued.			
Campbell, Henderson1909		. 130 00	
Campbell, Walter		. 377 50	
Disbursements	122 36		
Canning, James1909		- 552 36 - 75 00	
Carey, James	1	.) 92 00	
Carpenter, Joe		.] 122 00	
Carruthers, R		. 375 00	
Carson, G. M		. 394 00	-
Cassidy, Michael		. 22 00	
Chambers, J. K		.] 405 00	
Chambers, Thomas			
Charron, Joseph		. 131 00	
Chatson, Fred			
Chenier, Emile		. 380 00	
Chenier, D. A		. 413 00	
Disbursements		E45 25	}
Chretien, Napoleon		- 545 35 . 222 50	
Cole, J. J			
Colloton, R. B1909		. 70 00	
Connelly, Daniel1909 Connolly, Harold			-
Conture, N1909		. 102 00	1
Cornett, F. W		. 345 00 131 00	
Couch, Wellington			1
Coulter, Charles		380 00 415 00	
Coyne, Phin Disbursements			j
•		658 85	
Cross, Jule			
Cullen, M. T1909		131 00	
Currie, John C			
Cuyler, W		247 50	
Dagan, John1909 Daley, John1909		. 88 00	
Daniels, Ralph		672 00	
Darling, Thomas, & Son		402 50	00
Dedine, Joel	• • • • • • • • • • • • • • • • • • • •	392 50 340 00	
Demeras. J	.	92 00	
Dennison, H. J		131 00	
D'Eye, Henry1909		23 27	
Dickinson, Thomas			
Carried forward		32,479 19	134,393 91

Brought forward FIRE RANGING.—Continued. Didier, Hector		32,479 19 52 00 37 00	134,393 9
Didier, Hector			
Dillabough, Jacob			
Dillabough, Jacob			
Dixon, John H. Doble, Alex. R. 1909 Donald, Robert		0, 00	
Donald, Robert	1	300 00	
Dougherty A E		72 00	
		405 00 415 00	
Doyle. John		111 00	
Dovie T. J		131 00	
Draycott E A		65 00	
Draycott, F. W		106 00	
Duff, J. M.	• • • • • • • • • • • • • • • • • • • •	312 50 400 00	
Dugan, J. K		131 00	
Durnin E W		327 50	
Dyson, W		380 00	None
Fadv Robert S		88 00	
Eady, Peter1909	• • • • • • • • • • • • •	61 00	E.
East, W. J	• • • • • • • • • • • • •	390 00	
Eddy Bros. & Co1909	• • • • • • • • • • • • •	72 00 40 00	
Eilber, George		397 50	-
Elliott. Jackson		405 00	
English John		395 00	
Ethier Wilfred		58 00	
Ethier, Augustin1909		16 00	
Evans, Ed		300 00 90 00	
Favreau, George		131 00	
Ferguson, William		432 50	
Ferguson, George		412 50	
Fisher, George	• • • • • • • • • • • • • • • • • • • •	568 00	
Fitzhenry, John		131 00 130 00	
Foley, Welch and Stewart1909		35 83	
Forsyth O. G		285 00	
Fox. James		345 00	
Fraser, Donald	• • • • • • • • • • • • • • • • • • • •	397 50	
Fraser, WilliamGagne, F	915 50	247 00	
Disbursements	67 28		
·		982 78	
Gagnon, Felix,1909		132 00	
Gale W G		402 50	
Gardiner, John	• • • • • • • • • • • • • • • • • • • •	131 00	
Gavin, Henry		86 00 200 00	
Georgian Bay Lumber Co		67 00	
Gill. William		380 00	
Glandon, Napoleon1909		131 00	
Godin, Moise1909		79 00	
Gongeon, Arsene	• • • • • • • • • • • • • • • • • • • •	131 00	
Golden Lake Lumber Co		25 00 692 68	
Gordon, H. V.		335 00	
Gordon, Thomas		307 50	
Gordon, W. M		200 00	
Gorman, M. D1909		131 00	
Granton, James		367 50	

Service.	\$	c.	\$	c.	\$	c.
Brought forward			45,932	98	134,39	3 91
FIRE RANGING Continued.						
Graves, Frank1909				00		
Graves, Bigwood & Co				50		
Grawberger, Thomas				00		
Green, John				00		
Griffin. James				. 00		
Guertin, Oliver	• • • • • •			00 50		
Hall, Thomas				50		
Hamilton, Robert				50		
Hand, Thomas				00		
Hardy, Frank	• • • • • • •			00		
Hawley, James1909		 	1	00		
Hayden, George F	· • • • • •		402	50		
Hebert, Louis			360	00		•
Henderson, C. E		5 00 1 00				
Disbut sements	9-		309	00		
Henderson, John1909			1 1 1 1	00		
Herringer, W. J				00		
Hervieux, Joseph				00		
Hickey, James D				00		
Higgins, Douglas G				00		
Higley, C. E.				00		
Hodder, Leslie				00		
Hornick, George				50		
Howett, John			1	00		
Hughes, Gordon				50		
Hughes, William	• • • • • •			00		
Hurd, A		 		00		
Hurtubise, Augustine			386	50		
Husband, A. C.				50		
Hutton, Harold L				50 50		
Jamieson, Kenneth				00		
Jarvis, H. R.				50		
Jeffrey, William		• • • • •		00		
Johncox, Stephen1909		• • • • • •		00 - 00 -		
Johnson, George N.				50		
Johnson, Thomas1909				00		
Jones, Robert		• • • • • •		50		
Judge, Selwyn E		• • • • • •		5 00 5 00		
Jury, J. C				50		
Kelly, William1909				00		
Kennedy, Claude				2 50 00		
Kiely, Michael				50		
Kirkpatrick, Peter			212	2 50		
Kingsley, Ferdinand				50		
Kohl, A				7 50 2 50		
Labelle, Adolphe				5 00		
Carried forward			61,590	48	134,39	3 9.

	,		1
Service.	\$ c.	\$ c.	\$ c.
Brought forward		61,590 48	134,393_91
FIRE RANGING.—Continued.			
Labine, Emile		90 00	
Lafleur, William		131 00	
Lalonde, E	1	170 00 21 00	-
Lampson, Lyman		397 50	1 *
Langevin, Joseph		139 00 85 00	
Langdon, Herbey	1	397 50	
Larkins, Edward		131 00 104 00	**
Laurien, C		380 00	
Laurien, J		380 00 131 00	
Leach, W. J		315 00	
Lee, James B			
		1,133 59	
Legris, John	725 00		
Disbursements	240 59	965 59	
Lennox, Thomas A		315 00	
Lentz, W. H		$\begin{array}{c c} 62 & 00 \\ 131 & 00 \end{array}$	•
Locheed, Ralph		390 00	
Logneed, R. J		397 50 415 00	
Long, H. E	472 00	110 00	
Disbursements	53 40	525 40	
Lower, A		325 00	
Lunam, Thomas E		105 00 397 50	
Luton, R. M		337 50	
Lyle, J		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
McAvoy, Michael1909		69 00	
McCagherty, J. P1909		101 00 77 00	
McCallum, Frank		131 00	
McConnell, Eric		91 00	
McCormack, R		337 50 397 50	
McCullough, D. J.		440 00	
McDermott, T. J		132 00 350 00	
McDonald, Charles		400 00	
McDonald, Joseph		202 50 225 00	
McDonald, James A1909		15 00	
McDonald, Roderick		123 00 62 19	
McFadden, Ed1909		131 00	
McFaul, Lawrence		325 00 131 00	
McGown, Thomas		123 00	
McGregor, Thomas 1909 McIntyre, J. E. 1909		73 00 98 00	
	-		101 0007.7
Carried forward		74,331 25	134,393 <u>1</u> 91

McKinnon, H. 392 McLaren, W. E. 410 McLaughlin, John S. 1909 80 00 Disbursements 1909 91 McLead, Angus 1909 91 McLead, John 1909 79 McLean, Clarence 127 1909 McMillan, Ainslie 1909 124 McMurray, James 362 362 McNally, Andrew 117 362 McNutry, George 365 369 McPae, Duncan 461 362 McRae, Duncan 462 362 MacDonald, J. D. 362 362 MacDonald, J. D. 362 362 MacCillivray, E. F.	c.	\$ с
McKenzle, Robert	25	134,393 9
Disbursements		
Disbursements	1	
McKinn Robert	7 07	
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Morand, Louis 415 Mosley, Edward 1909 124 Mowat, James 1909 107		
Mowat, James	00	
Murphy Charles		
12/	00	
Nadon, Damase 387 Neely, A. H. 357		
Carried forward		

		,	
Service.	\$ c.	\$ c.	\$ c.
Brought forward		87,150 39	134,393 91
FIRE RANGING.—Continued.			
Newman, R. J		92 00	
Newburn, William		400 00 134 00	
Noonan, John	• • • • • • • • • • • • • • • • • • • •	69 00 390 00	
O'Brien, M1909		146 00	
O'Connor, Lawrence			•
Odjick, William1909		146 85 86 00	
O'Malley, David		397 50	
O'Nell, Samuel 1909 Oliver, J. A.		$110 00 \\ 1,269 51$	
Onegut, Joseph		467 50	P
Orr, William		43 00 91 00	
Ouelette, Frank		430 00 131 00	
Paisley, Lorenzo1909		131 00	
Paquette, O		$egin{array}{ccc} 131 & 00 \ 25 & 00 \end{array}$	
Parker, William1909		131 00	
Patterson, Bryson C		400 00 375 00	
Pelot, John 1909 Pembroke Lumber Co. 1909		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Phead. Dennis		170 00	
Pigeon, Charles		445 00 390 00	
Pingle, Alex.		407 50	
Piskey, D. 1909 Plourde, Charles 1909		50 00 43 00	
Poulin, Noe Poulin, William		$\begin{array}{c c} 327 & 50 \\ 318 & 75 \end{array}$	
Powell, John, Jr.		142 50	
Prevost, David Price, Percy		380 00 400 00	
Pronger, J. F		205 00	
Proulx, A. Quesnel, Fred		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Quilty, J. J. Raycott, Thomas		417 50 131 00	
Revnolds. Harry		232 50	• -
Reynolds, Napoleon		390 47 395 00	
Richardson, E. A		335 00 370 00	
Richardson, Sylvester		154 00	
Robertson, Bruce Robinson, H. P.		312 50 322 50	
Rochford, Adolph		430 00	
Rockall, F. W. Rodden, M. J.		387 50 325 00	
Rodgers, Walter		405 00 131 00	
Ross, H. E.		300 00	
		130 00 120 00	
Carried forward			134,393 91

Service.	\$	c.	\$ c.	\$	c
Brought forward			102,110 47	134,393	91
FIRE RANGING.—Continued.					
Ryan, William H1909			95 00		
Sandow, Peter			131 00		
Savard, August			370 00		
Schiller, James G			322 50		
Scott, Robert			600 00		
Scott, R. R			290 00		
Servage, Grant			382 50		
Shannon, R. M			131 00		
Sharp & Jackson			127 63		
Sheppard & Wallace			58 00		
Shepard & Morse Lumber Co			212 00 108 00	1	
Sherwood & Russel			200 00		
Shier, J. D., Lumber Co		• • • • • •	158 00		
Shives, R. D			134 00		
Shouldice, John1909			32 00		
Simpson, A			200 00		
Simpson, Theodore $\dots 1909$			27 00	1	
Simpson, William			362 50		
Sinclair, D. G.			$320 \ 00$		
Singleton, A			50 00		
Skinner, W. P.			72 00		
St. Laurent, Joseph			131 00		
Sleemin, Dufferin			312 50		
Smeltzer, J. H. Smith, A. L.		• • • • • •	335 00 380 00		
Smith, Hilliard1909					
Smith, Joseph1909			79 00 131 00		
Smith, Nelson		• • • • • •	380 00	1	
Smith, Rex		• • • • • •	335 00		
Smyth, P. J			362 50		
Snetzinger, H. A			325 00		
Solomon, John1909	1		112 00		
Somers, Joseph W1909			131 00		
Soubliere, Leon			397 50		
Spanish River Lumber Co			132 50	The state of the s	
Spearing, Fred			327 50		
Spears, Henry1909			60 00		
Spence, William, Jr			415 00		
Spillette, A		• • • • • •	$131 00 \\ 412 50$		
Spillette, J. J		• • • • • •	412 50		
Spreadborough, N			178 75		
Spreadborough, G			132 00		
Steep, Frederick1909			82 00		
Stevenson, Alex			405 00		
Stevenson, Lionel			382 50		
Stevenson, William1909			20 85		
Sullivan, John, Sr			$392\ 50$		
Sullivan, John, Jr			300 00		
Suter, F. J			340 00		
Swinston, Charles			400 00		
Symington, William			131 00		
Fang, John1909 Fapp, Thomas1909			42 25		
Papping, Thomas			$\begin{array}{cccc} 55 & 00 \\ 2 & 00 \end{array}$		
Taylor, Charles N			131 00		
Laylul Challes IV				Į.	
Taylor, William J			132-00		
Taylor, William J			132 00		

Service.	\$	c.	\$	c .	\$	c
Brought forward			114,92	2 95	134,393	9
FIRE RANGING.—Concluded.						
Thessalon Lumber Co1909			7	7 01		
Chibert, Philip				7 50		
Chompson, Chris	• • • • • •	• • • • • •		8 00	-	
Fhompson, Robert		• • • • • •		2 00		,
Chomson, John				7 50		
Chomson, R. D	l			1 00		
Fimmony, Edward1909				1 00		
Finsley, H		• • • • •		0 00		
Fravis, Thomas		• • • • •		0 00		
Fremblay, J. F.		• • • • • •		$egin{array}{ccc} 0 & 00 & \ 2 & 50 & \ \end{array}$		
Preton, Frank				00 0		
Funstell, George				2 50		
Tyson, William1909			11	4 00		
Jrquhart, A		• • • • • •		0 00	-	
Urquhart, John		• • • • •		5 00		
Vermette, John1909				2 50 7 00		
Viverais, M				0 00		
Wagner, H. W	1	57 50	10	00		
Disbursements		27 45			-	
Walless Tamor 1000				4 95		
Walker, James 1909 Wallberg, E. A. 1909				2 00		
Wallace, Arthur J		• • • • • •		6 48 7 50		
Walton, Bruce				0 00		
Ward, James				7 50		
Watts, George				4 59		
Waugh, Keith Weir, George1909				0 00		
Weir, George		• • • • • •		$egin{array}{c c} 2&10& \cr 2&50& \cr \end{array}$		
Wickens, H		• • • • • •		7 50		
Williams. Gordon	ĺ			5 00		
Williams, L. E				7 50		
Williams, William				1 37	\	
Williamson, Hugh Willoughby, J. B.		• • • • • •		0 00		
Wilkes, G. H.		• • • • • •		0 00		
Wilkins. G. N				8 00		
Winn, Joseph				7 50		
Wisseau, M				2 50		
Wodehouse, R. P			30	0 00		
Voodcock, George	, .	32 50		- 1		
Disbursoments ,		32 45	56	4 95	_	
Wright, Colin 1909				6 65		
Wright, H. H				2 50		
Wright, John S			40	7 50		
Yearly, Fred. 1909 Yeats, Henry F. 1909				1 00		
Youmans, D. E				$egin{array}{ccc} 0 & 00 & & \ 4 & 00 & & \ \end{array}$		
Young, Robert				0 00		
		• • • • • •	70		128,634	1 (
Carried forward	1			-	263,027	

Service.	\$ c.	\$ c.	\$	c
Brought forward			263,027	9
Forest Reserves.				
Temagami Reserve—\$46,397.95.				
Allan, D		392 50		
Allan, W. N		365 00		
Ashall, E. R		$\begin{array}{c c} 370 & 00 \\ 392 & 50 \end{array}$		
Barr, James		375 00		
Barrett, Thomas	765 00			
Disbursements	353 37	1,118 37		
Beibet, August		242 50		
Bessette, E		390 00		
Boland, A		97 50		
Bond, St. GeorgeBonter, E. R		$\begin{array}{c c} 90 & 00 \\ 382 & 50 \end{array}$		
Brennan, P.		255 00		
Brazeau, Z		380 00		
Brazeau, J		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Broughton, P		322 50		
Buisson, William	142 50			
Disbursements	7 90	150 40		
Burrows, T. L.		$150\ 40\ 192\ 50$		
Bushfield, N. A		387 50		
utcher, J. C.		390 00		
autler, F. B.	• • • • • • • • • • • • •	$\begin{array}{c c} 392 & 50 \\ 14 & 60 \end{array}$		
avan, W. E.		350 00		
lement, F. W		377 50		
line, G	• • • • • • • • • • • • • • • • • • • •	35 00		
combes, W.		380 00 370 00		
Derosier, John		387 50		
Ouval, C. A		350 00		
'aries, R		$egin{array}{c c} 1,356 & 00 & \\ 16 & 45 & \end{array}$		
'inlay, J. R		322 50		
ortin, J		277 50		
renette, Sam	• • • • • • • • • • • • • • • •	$\begin{array}{c c} 322 & 50 \\ 370 & 00 \end{array}$		
renier, James		362 50		
lagerman, G		387 50		
Iamilton, G. M. Ianington, A. E.		380 00		
Iarkness, A. E.	• • • • • • • • • • • • • • • • • • • •	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
tarrison, J. W		392 50		
Ieenan, Patrick		567 50		
lenderson, Charles	• • • • • • • • • • • • • • • • • • • •	$\begin{array}{c c} 25 & 23 \\ 387 & 50 \end{array}$		
Ieraux, J		167 50		
lindson, C		124 66		
Iutchinson, J. A	$egin{array}{c c} 172 & 50 \\ 12 & 05 \\ \end{array}$			
· -		184 55		
ames, C.		32 50		
ames, John ocko, John		$\begin{bmatrix} 267 & 50 \\ 227 & 50 \end{bmatrix}$		

Service.	\$ c.	\$ c.	\$ c.
Brought forward		16,315 26	263,027 90
Forest Reserves Continued.			4
Temagami Reserve.—Continued.			
Jones, N. L		12 50	
Keenan, J. T		390 00	
Kelso, R. F.		365 00	6
Kennear, John		$\frac{170\ 00}{350\ 00}$	
Knox, E		920 00	
Lamarche, A		332 50	-
Latoure, J		392 50	
Le Blanc, A		305 00	
Le Blanc, O		437 50	
Leggett, R. P		385 00	
Levigne, L		182 50 260 00	
Livingstone, H		390 00	
Lytle, L. B		342 50	
McCammon, J. G			
Disbursements	24 70		
****		64 70	
McDonald, C		$\begin{array}{ccc} 182 & 50 \\ 385 & 00 \end{array}$	
McDonald, G. G		370 00	•
McGregor, P	860 00	0,000	
Disbursements			
		874 45	
McIlmoyle, W		345 00	
McKenzie, C. H		375 00 300 00	
McMenemy, G	• • • • • • • • • • • • • • • • • • • •	385 00	
McNaughton, F. D.		000 00	
Disbursements			
		963 24	
McNeil, E. H	• • • • • • • • • • • • • • • • • • • •	380 00 357 50	
McPhee, D	1,191 00	991 90	
Disbursements			
		2,018 80	
Manning, V		82 50	
Mattchett, L. L.	• • • • • • • • • • • • • • • • • • • •	380 00	
Matthews, H. E		307 50 372 50	
Mickleborough, C.		120 00	
Mills, P		360 00	
Montgomery, Alex			
Disbursements	19 00	F71 F0	
Monrow E		571 50 85 00	
Morrow, F		380 00	
Nadon, P.		187 50	
Neil, W. E		380 00	
Nicolet, F.		390 00	
Nichols, H		352 50	
O'Connor, J	• • • • • • • • • • • • • • • • • • •	165 00 377 50	
Palmer, C. E.		362 50	
Petrant, W		390 00	
Phillips, R. A.		382 50	
			263,027 9

Service.	\$ c.	\$	c	
Brought forward		34,197 95	263,027	9
Forest Reserves Continued.				
Temagami Reserve.—Concluded.				
Potvin, E		330 00		
Prudhomme, A		387 50 390 00		
Ranger, A		362 50		
Ranger, P		380 00		
Raymond, A		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Renton, T. H.		377 50		
Reynolds, G		87 50		
Roadhouse, L		$ \begin{array}{c cccc} 195 & 00 \\ 125 & 00 \end{array} $		
Roche, H.		225 00		
Rochon, F		237 50		
Rochon, J		$\begin{array}{c c} 920 & 00 \\ 302 & 50 \end{array}$		
Thompson, A. H Trimble, H. J		352 50		
urner, J		390 00		
Tutt, W. R.		350 00		
ytler, N. D. Vair, M. G.		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
alois, P		180 00		
alois, S.		362 50		
Vivaris, D		$\begin{bmatrix} 1,120 & 00 \\ 380 & 00 \end{bmatrix}$		
Vatts, E. M		370 00		
Vhite, T		312 50		
anders, N. M		$\begin{bmatrix} 27 & 50 \\ 280 & 00 \end{bmatrix}$		
tewart, William		150 00		
Stuart, J. E	1	375 00		
Stuart, J. A. Shelson, H.		$\begin{bmatrix} 387 & 50 \\ 270 & 00 \end{bmatrix}$		
Sleeth, B		387 50		
myth, P. J	1	25 00		
weeney, D		342 50		
		377 50		
Metagami Reserve—\$6,578.55.				
Blais, Odilore		382 50		
Burden, John Disbursements	$\begin{array}{c c} 668 & 00 \\ 155 & 70 \end{array}$			
		823 70		
hambers, E. V.		385 00		
Julp, J. S.Iveline, A.	• • • • • • • • • • • •	387 50 407 50		
'arley, J. T.		382 50		
Ioward, R. H.	87 50			
Disbursements	7 35	94 85		
Kitt, A. N.		347 50		
eadbetter, W. R.		360 00		
eatherdale, W. B.		385 00		
Macauley, A. T		$\frac{385}{385} \frac{00}{00}$		
Morley, Warren		140 00		
			263,027	_

Service.	\$ c.	\$ c.	\$ c.
Brought forward		51,264 00	263,027 96
Forest Reserves.—Continued.			. 4
Metagami Reserve.—Concluded.			1
Poisson, A. L.		390 00	
Saunders, C. E. Thurston, A. M.	• • • • • • • • • • •	385 00	
Wallace, J. B.		385 00 287 50	,
Washburn, B. L.		265 00	
Mississaga Reserve—\$9,204.78.			
Albright, L.		425 00	
Bickell, R. B. Body, W. J.		380 00 382 50	
Copman, C. C		377 50	
Curtis, G. S		360 00	
Davidson, W. M. Dean, T. N.	• • • • • • • • • • • • •	377 50 327 50	
Dewar, E. H		360 00	
Dobbin, G. M		382 50	
Dobson, H. E Easton, L.	• • • • • • • • • • • •	287 50 387 50	
Gorsline, R		350 00	9"
Granam, James H		2 70	
Greer, J. Holmes, A. B.	• • • • • • • • • • • • • • • •	382 50	
Houser, F. B		380 00 230 00	
Kinney, William	975 00	200 00	
Disbursements	329 58	1 004 50	
Morgan, J. P		1,304 58 375 00	
Mutchmore, J. R		347 50	
Porte, A. H. Reid, Byron	• • • • • • • • • • • • • • • • • • • •	42 50	
Seeley, S.		355 00 402 50	
Smith, R. M		312 50	. *
Wheeler, Alex. White, G. E.	• • • • • • • • • • • • • • • •	367 50	
	••••••	305 001	
Nepigon Reserve—\$7,831.77.			
Anger, Alex		340 00	
Bliss, L. E Disbursements . Bothwell, George E		133 68 335 00	
Bouchard, Joseph		335 00	
Cook, Kenneth E		335 00	•
Cook, Lorne H. Day, Oswald	•••••	307 50	
De La Ronge, Charles		307 50 335 00	
Ernest, F. E		315 00	
Grant, George Hiscocks, H. G.	••••••	27 50 297 50	
Johnston, N. F		322 50	
Leitch, P. A	750 00		
Disbursements	233 09	002.00	
Lock, Russell		983 09 330 00	
Lucas, Fred		345 00	
MacGillivray, Roy		37 50	•
Carried forward		67,268 05	263,027 96

Service.	\$ c		\$	c.	\$	c.
Brought forward		67	,268	05	263,027	96
FOREST RESERVES.—Concluded.			,		200,027	
Nepigon Reserve.—Concluded.						
Montgomery, R. L. Ritchie, W. Scott, N. Servais, Albert J. Disbursements	510 10	00 00	370 365 365 520	00 00		
Shipman, George W	540 10	00	287 550			
Wagner, H. W			287			
Eastern Reserve—\$1,491.25.						
Bishop, H	400 0 26 2	<u>o</u>	355 355	00		
Watkins, R.			426 355			
Sibley Reserve—\$100.00.						
Oliver, J. A	• • • • • •		100	00		
Quetico Reserve—\$6,641.00.						
Adams, W. J. Breckon, Fred Bury, H. J. Campbell, J. S. Crawford, E. J. Darly, W. Darlington, E. Hampshire, Fred Henry, Alex. Jonhston, R. McDonald, J. Martin, W. A. Readman, R. Sanderson, A. J. K. Scholes, W. Strain, J. Sutton, George Tripp, E. C. Wall, George			165 195 357 360 360 352 360 360 360 360 360 360 360 360 360	00 50 00 00 00 50 00 00 50 00 00 50 00 0	78,2 45_	30
MINES AND MINING.						
Disbursements	4,250 0 999 4 4,000 0	$\frac{8}{0}$ 5	,249	48		
Disbursements	745 5		,745	50		
Carried forward		9	,994	98	341,273	26

Service.	\$ c.	\$ c.	\$ c.
Brought forward		9,994 98	341,273 26
MINES AND MINING Concluded.			
Price, S., Mining Commissioner, services Dance, R. W., services Disbursements	3,200 00 865 00 1,426 15	5,491 15	
Corkill, E. T., Inspector of Mines, services Disbursements	2,150 00 1,408 54		-
Knight, C. W., Assistant Geologist, services Disbursements	1,900 00 351 13	3,558 54 2,251 13	·
			21,295 80
EXPLORATIONS AND INVESTIGATIONS.			
Baker, M. B	675 00 1,168 40	1.843 40	
Bartlett, James	692 92 45 80		
Bowen, N. L. Disbursements	471 16 704 90	738 72	
Burrows, A. G	1,743 00 2,685 64	1,176 06	
Moore, E. S	455 77 1,439 37		
Parsons, A. L. Disbursements	519 23 970 45	1,895 14	
Robinson, A. H. A	2,000 00 499 57	1,489 68	
Rogers, W. R	1,317 28 449 26	2,499 57	
Scott, John	600 00 284 45	1,766 54	
Sharpe, Donald	550 00 233 15	884 45	
Toyne, John	50 00 22 65	783 15	
Express		72 65 55	17,578 55
SPECIAL SERVICES AND UNFORESEEN EXPENSES			
McNeill, W. K		411 62 681 63	1 000 05
SPECIAL SURVEYS IN MINING DISTRICTS			1,093 25 814 57
EXPERIMENTAL TREATMENT OF ORE			5,313 81
Carried forward	1	1-	387,369 24

Service.	\$	c.	\$	c.	\$ c.		
Brought forward					387,369_24		
MINING RECORDERS.							
Bowker, S. T., Recorder	889 308	75 79	1.100	-			
Bruce, A. E. D., Recorder Blair, F. J., Clerk Graham, F. W., Clerk Gray, J. B., Clerk Disbursements	453 631	0 00 3 46 1 14 5 76	1,198	3 54			
Campbell, C. A., Recorder Washburn, H., Clerk Yonge, E., Clerk Disbursements	779 508 382	92 86 12 75	5,577	57			
Lemieux, F. F., Recorder Disbursements Hough, J. A., Recorder Browning, A. J., Clerk			2,252	31			
Disbursements McArthur, T. A., Recorder McLaren, Kate, Stenographer Disbursements		00 00	2,175	45			
McQuire, H. F., Recorder	500 182	00	2,170	86			
Morgan, J. W., Recorder	846 311		682				
Sheppard, H. E., Recorder Gordon, T. C., Clerk Glazier, M. B., Clerk Keenan, H. F., Clerk Disbursements	1,000 1,080 450 899 1,458	00 00 99	1,157				
Skill, A., Recorder Adams, W. G., Clerk Glazier, M. B., Clerk Disbursements	1,200 597 626 367	69 54	4,887				
Smith, G. T., Recorder McAuley, N. J., Clerk Bruce, A. E. D., Clerk Ferguson, R. H., Clerk. Meagher, T. J., Clerk Sarsfield, J. B., Clerk Smith, G. L., Clerk Monroe, Eva, Stenographer Smith, M. H., Stenographer	2,200 300 300 495 888 733 390 720 480	00 00 00 50 32 00 00	2,791	01			
Disbursements Spry, W. L., Recorder Disbursements	714 531 221	50	7,221				
Carried forward			752 30,863		387,369 24		
	• • • • • • •	• • • • ′	50,000	J 1	901,000 ER		

	,	,	
Service.	\$ c.	\$ c.	\$ c.
Brought forward		30,863 94	387,369 24
MINING RECORDERS.—Concluded.			
Dominion Express Co.'y King's Printer Methodist Book Room Harcourt, E. H. Co.'y	1,114 39 234 86	1,733 96	·
Provincial Assay Office.		-	32,597 90
Turner, N. L.	1,200 00		м.
Disbursements		1,728 29	
Rothwell, T. E		1,720 29	· .
Supplies		. 1,290 11	
Disbursements	338 22		•
Equipment	90 66	933 99	3,952 39
CULLERS' ACT.			
Oliver, J. A., Disbursements McDougall, J. T., Disbursements Bliss, C. L., services Close, J. L., services Livery Rainy River Navigation Co.'y, use of launch Town of Fort Frances, rent of hall Floyd, William, rent of tables Advertising		2 95 4 00 12 00 31 00 10 00 5 00 5 00	99 73
Surveys	.		129,338 51
BOARD OF SURVEYORS		1	200 00
Contingencies.			200 00
Departmental.			
Printing and Binding	2,554 42		
Stationery		0.004.20	
Postage	_,	9,804 39	
Express		2,507 04	
Telegraphing Telephone Messages	. 24 40		
Telephone Rent			
Subscriptions	. 332 54	- 737 92	·
Advertising	6,291 86	6,624 40	
Typewriters, rent and repairs Elliott-Fisher Co.'y, machine, etc. Corkill, E. T., Travelling expenses Johnston, H. E., Travelling expenses	. 240 50 11 00		
Carried forward	. 839 70	19,673 75	53,557 77

Appendix No. 6.—Concluded.

	\$ c.	\$ c.	\$ c.
Brought forward	839 70	19,673 75	553,557 77
Departmental.—Concluded.			
Kirkpatrick, G. B., Travelling expenses Rorke, L. V., Travelling expenses White, A., Travelling expenses Whitson, J. F., Travelling expenses Yates, Geo. W., Travelling expenses	69 50 101 10 36 95 327 62 35 14		
Extra Clerks Sundries	6,079 63 430 72	1,410 01 6,510 35	
Bureau of Mines.			27,594 11
Printing and Binding	1,149 70 2,311 36	3,461 06	
Telegraphing Express and cartage Advertising Subscription	285 84 107 84 4,263 28 215 75		
Gibson, T. W., Travelling expenses Johnston, H. E., Travelling expenses Moore, E. S., Disbursements Whitson, J. F., Travelling expenses Work, John do Souch, J. W.	21 80 200 00 42 53 50 00 279 75 105 35	4,872 71	
Typewriter and repairs Bell Telephone Co.'y Postage	138 50 65 17 437 30	699 43	
Extra Clerks Nicholas, F. J., preparing index Determination of Leases Legal Fee Sundries	76 50 211 71 100 00	640 97 1,002 66	
	341 84	730 05	11 100 00
Provincial Mines			11,406 88
COMMISSIONS RE SUNDRY INVESTIGATIONS	•••••		212 45
REFUNDS	• • • • • • • • • • • • • • • • • • • •		148 89
Refunds re Gowganda Townplot	•••••	,	13,587 21
TOTAL DE GONGANDA TOTALLOI,	• • • • • • • • • • • • • • • • • • • •		1,081 12

D. GEO. ROSS, Accountant.

AUBREY WHITE, Deputy Minister, Lands and Forests.

Appendix No. 7.

Statement of Expenses on account of various services under the direction of the Department of Lands, Forests and Mines for the year ending October 31st, 1910.

Service.	\$	c.	
DIAMOND DRILL	13	00	-
ALGONQUIN PARK	13,352	78	
RONDEAU PARK	2,371	50	
VETERANS' COMMUTATION	2,050	00	
[T	\$17,787	28	

D. GEO. ROSS, Accountant. AUBREY WHITE.
Deputy Minister of Lands and Forests.

Appendix No. 8.

WOODS AND FORESTS.

Statement of revenue collected during the year ending October 31st, 1910.

	\$	c.
Amount of Western collections at Department	40.573	60
	\$1,835,082	71

J. A. G. CROZIER, Chief Clerk in Charge. AUBREY WHITE,
Deputy Minister.

Appendix No. 9.

PATENTS BRANCH.

Statement of Patents, etc., issued by the Patents Branch from 1st November, 1909, to 31st October, 1910.

Crown Lands	813
School do	30
Mining do	453
Public do (late Clergy Reserves)	4
Free Grant Lands (A. A.).	125
do (Act of 1880)	477
Rainy River Lands (Mining and Crown)	180
Mining Leases	160
Licenses of Occupation.	31
Crown Leases.	10
Crown Lands (University)	12
Mining do do	- 1
Free Grant, Act of 1901 (Veterans)	$1.21\bar{7}$
Temagami Islands	4
Rondeau Leases	Â
Total	3,521

CHARLES S. JONES.

Chief Clerk.

AUBREY WHITE,

Deputy Minister.

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

	Area covered		covered	Saw logs.					Saw logs.					Boom and
Agencies.	by timber license.	Pine.		Otl	her.	P	ine.							
	Square miles.	Pieces.	Feet B.M.	Pieces.	Feet B.M.	P. ees.	Feet B.M.							
Western Timber District Belleville Timber	13,994½	11,096,599	, ,	1,415,824	51,464,961	233,669	28,266,239							
District Ottawa Timber District	768 1 5,479	467,336 1,736,792	17,275,977 87,376,802	ŕ	13,365,150 19,403,083	2,969 37,174	,							
	20,2413	13,300,727	573,746,453	2,498,477	84,233,194	273,812	32,869,338							

General Statement

Agencies.	Cordwood.		ark.	ау		aph s.	es.	es.	ood.
	Hard.	Soft.	Tan Bark	Railway ties.	Posts.	Telegraph poles.	Car stakes	Shingles.	Pulpwood.
	Cords.	Cords.	Cords.	Pieces.	Cords.	Pieces.	Cords.	Per 1,000	Cords.
Western Timber District Belleville Timber District Ottawa Timber District	17,818	20,624	14,117	3,786,193	194	. 5,210	• • • • •	23,500	75,073
	93	123	224	12,715	989	1,212			1041
	150	4,903	435	4,748	139	801	3		24,8171
	18,061	25,650	14,776	3,803,656	1,322	7,223	3	23,500	99,995

J. A. G. CROZIER, Chief Clerk in Charge.

No. 10.

FORESTS.

Rent and Bonus during the year ending 31st October, 1910.

DESCRIPTION OF TIMBER.

Dimension.			Square '	Timber.				Dire		
- O1	ther.	Pi	ne.	Hem	lock.	Pil	es.	Piling.		
Pieces.	Feet B.M.	Pieces.	Cubic feet.	Pieces.	Cubic feet.	Pieces.	Lineal feet.	Pieces.	Feet B. M.	
63,272	8,248,161	7,295	301,397		•••••	2,474	34,243	530	85,224	
10,558	1,245,226	70	2,419							
18,816	1,772,612	27	768	239	4,203					
92,646	11,265,999	7,392	304,584	239	4,203	2,474	34,243	530	85,224	

of Timber.-Concluded.

Amounts accrued.

Trans- fer bonus.	Interest.	Trespass.	Timber dues.	Bonus.	Deposits timber sale of 1910.	Ground rent.	Total.
\$ c 2,740 00	\$ c. 9,223 35	\$ c. 30,939 06	\$ c. 1,052,573 31	\$ c. 356,967 53	\$ c. 92,342 00	\$ c. 69,405 00	\$ c. 1,614,190 25
103 50	282 04	5,545 61	26,518 21		• • • • • • • • • • • • • • • • • • • •	5,416 00	37,865 36
1,020 00	161 27	1,282 29	124,937 83	27,047 32	••••	29,360 00	183,808 71
3,863 50	9,666 66	37,766 96	1,204,029 35	384,014 85	92,342 00	104,181 00	1,835,864 32

AUBREY WHITE, Deputy Minister.

Appendix No. 11.

Statement of the work done in the Military Branch of the Department of Lands, Forests and Mines, during the year ending the 31st October, 1910.

Letters received.	6.000
Letters written	7.562
Maps supplied to Veterans	2.500
Location Certificates issued	85
Locations made	300
Surrenders	90
Surrenders	1.238
Locations cancelled for non-compliance with the regulations	261

R. H. BROWNE,

AUBREY WHITE,

Chief Clerk in Charge.

Deputy Minister.

Appendix No. 12.

Statement of the number of Letters received and mailed by the Department in 1908, 1909 and 1909-10.

•		Let	ters receiv	ed.		-	_•		s and from
Year,	Sales and Free Grants.	Surveys.	Woods and Forests.	Mines.	Totals.	Names indexed.	Orders-in-Council.	Returned letters.	Letters, circulars reports mailed f Department.
1908 1909 (10	22,478	11,263	9,386	9,183	52,310	58,900	243	84	70,000
months). 1909-10. new fis- cal year.	19,500 23,700	16,016 18,290	9,086 9,752	8,398 8,498	53,000 60,240	59,400 67,210	178 201	72 81	62,800 69,400

FRANK YEIGH, Registrar, AUBREY WHITE,

Deputy Minister.

Appendix No. 13.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties and of patents issued under "The Free Grants and Homesteads Act" during the year ending 31st October, 1910.

Township.	District or County.	A	gent.	No. of persons located.	No. of acres located.	purchasers.	No. of acres sold.	lots nmed.	No. of patents issued.
				No. of loca	No. of loca	No. of	No. of	No. of lots resumed.	No. of issu
Baxter Brunel	Muskoka	J. B. Brown,	Bracebridge	6	651	5	29	8	
Cardwell	"	66	44	6	925	i	13	6	2
Chaffey	"	44	44	3	300	1	10	3	
Draper	**	44	44	2	211		• • • • • • •	2	
Franklin	44	44	46	4	517	5	151	3	9
Freeman (pt.)	66	66	46	32	4,418	2	11^{2}		3
Macaulay	**	. "	44		1,110	ī	î	· · · · ·	ĭ
Medora	**	. 11	44	1	100	1	1/2	i	
Monck	64	64	**						
Morrison	4+	**	44	3	434	2	2^{3}_{4}	3	
Muskoka	**	**	**			1	1		2
McLean	6.	**	66	8	988			10	
Oakley	**	**	44	5	73 6			4	1
Ridout	**	66	"	3	372	2	16 9	3	
Ryde				2	243			2	-1
Sherborne		"	**	2	160	2	86	1	
Sinclair	Muskoka		44	6	1,007	2	47	6	10
Stephenson	"	"					• • • • •		
Stisted	66	**	"	2	100		• • • • • • •	···· <u>2</u>	1
Watt Wood	6.6	46	"	9	198 1,586	8	41	7	13
Burpee	Parry Sound	F. R. Powell,	Parry Sound	1	206	2	155		2
Carling	"	**	66	6	685	1	1	3	
Christie	"	"	6.6 6.6	10	1,681	2		8	
Conger			**	5	654	1	$1\frac{1}{2}$	3	9
Cowper			"	··· <u>;</u>		1	$5\frac{1}{2}$		
Ferguson		"	"		297			1	
Foley Hagerman	**	**	"	10	190	1 2	1	1	2 5
Harrison	**	16	"	10	$\frac{1,646}{200}$	8	$\begin{array}{c} 6 \\ 72 \end{array}$	8	8
Humphrey	46	**	**	1	82	1	99	i	1
McConkey	66	44	44	2	300	i	64	2	
McDougall	**	"	66	5	664	ī	100	4	4
McKellar	66	**	44	3	498			î	$\hat{2}$
McKenzie	• 6	66	44	5	865	5	58	4	
Monteith	• •	66	**	8	1,315	3	47	6	
Shawanaga	"	"	14	1	91				6
Wilson	"	14	61	1	34		• • • • • •		2
Chapman	"	Dr. J. S. Fre	eborn, Magnet-		005			_	_
Croft	**	**	awan.		905		19	6	7
Ferrie	**	44	"	1 1	209 196	2	13	1	5 1
Gurd	44	46	66	8	1.079	i	·····2	$\frac{1}{2}$	
Lount	44	44	**	4	537	1	100		4
Machar	**	66	66	7	1.296		100	``ii	6
Mills	**	44	44	4	438	i	50	2	i
				21	450		2111	-	

Appendix No. 13.—Continued.

Township. District or County. Agent. State S			• •								1
Spence	Township.	or	1	Agent.		No. of persons located.	No. of acres located.	ţ,	of	No. of lots resumed.	No. of patents issued.
Spence	Ryerson	Parry Sound	Dr. J. S. Fi	reeborn, M							
Bethune		}	"	61 61	"	9	1,289		•••••	5	4
Hardy	Armour	Parry Sound	W. Jenkin,	Emsdale.							5
Hardy		"		"				•••	• • • • • • • •		5
Hardy	McMurrich		1			1				1	3
Hardy		I .						<u>;</u>		2	4
Himsworth	Proudfoot					4	091	1	12	• • • •	Э
Laurier	Hardy	1	H. J. Ellis, l	Powassan.				ļ <u>.</u>			
Nipissing	Himsworth	1	7.	"				3	103		
Bonfield Nipissing W. J. Parsons, North Bay 11 1,180 8 7	Nipissing	1	"							5	9
Boulter	Patterson	**	**	"		. 4			• • • • • • • • • • • • • • • • • • • •		2
Boulter	Ronfield	Ninissing	W J Parson	ne North I	Rav	11	1 180			8	-13
Chisholm	Boulter	- "	٠.	**	Juj						
Anson Haliburton R. H. Baker, Minden	Chisholm	"	ľ					4	224		
Glamorgan "	Ferris					12	1,588	• • •	• • • • • • •	8	'
Hindon		Haliburton	R. H. Baker	, Minden							
Lutterworth		"	::	"		1	964	, 2	14	4	3
Minden """"""""""""""""""""""""""""""""""""		44	**	"			67				i
Stanhope	Minden		1				200			2	
Anstruther Burleigh, N.D			l					•••			• • • • •
Burleigh, N.D. " " " 1 98 1 2 Chandos " " " 6 618 5 6 Methuen " " " 2 150 1 1 Cavendish Peterboro' James Wilson, Kinmount 1 73 Cardiff Haliburton " 2 259 2 5 Galway Peterboro' " " 3 486 1 1 4 2 Monmouth Haliburton " " 8 993 6 5 Bangor Hastings J. R. Tait, L'Amable 6 497½ 1 1 Cashel " " " 3 373 Cashel " " " 1 111 1 2 Herschel " " " " 1 199 <td>Sтаппоре</td> <td></td> <td></td> <td></td> <td></td> <td>'</td> <td>0044</td> <td>•••</td> <td></td> <td>•</td> <td>1</td>	Sтаппоре					'	0044	•••		•	1
Chandos " " " 6 618 5 6 Methuen " " " 2 150 1 1 Cavendish Peterboro' James Wilson, Kinmount 1 73 Cardiff Haliburton " 2 259 2 5 Galway Peterboro' " " 3 486 1 1 4 2 Monmouth Haliburton " " 8 993 6 5 Bangor Hastings J. R. Tait, L'Amable 6 497½ 1 1 Carlow " " " 1 111 Cashel " " " 1 111 1 2 Dungannon " " " 1 199 1 1 1 6 3 3 3 1 1 1 1 1 <td></td> <td></td> <td>T. G. Eastla</td> <td>and, Apsle</td> <td>7</td> <td></td> <td>•••••</td> <td></td> <td></td> <td></td> <td>1</td>			T. G. Eastla	and, Apsle	7		•••••				1
Chandos " " " 6 618 5 6 Methuen " " " 2 150 1 1 Cavendish Peterboro' James Wilson, Kinmount 1 73 Cardiff Haliburton " 2 259 2 5 Galway Peterboro' " " 3 486 1 1 4 2 Monmouth Haliburton " " 8 993 6 5 Bangor Hastings J. R. Tait, L'Amable 6 497½ 1 1 Carlow " " " 1 111 Cashel " " " 1 111 1 2 Dungannon " " " 1 199 1 1 1 6 3 3 3 1 1 1 1 1 <td></td> <td></td> <td>"</td> <td>"</td> <td></td> <td>-1</td> <td>98</td> <td>• • • •</td> <td></td> <td>1</td> <td>1</td>			"	"		-1	98	• • • •		1	1
Cavendish. Peterboro' James Wilson, Kinmount 1 73 Cardiff. Haliburton " " 3 486 1 1 4 2		"		"		6	618			5	6
Cardiff. Haliburton " " 3 486 1 1 4 2 Monmouth Haliburton " " 8 998 6 5 Bangor Hastings J. R. Tait, L'Amable 6 497½ 1 1 1 1 Carlow " " " " 1 111 1 2 1 2 Dungannon " " " " 1 199 1 1 1 1 Faraday " " " " 1 100 1 1 3 3 Herschel " " " " 1 100 1 1 1 1 1 Mayo " " " " 1 100 1 1 1 1 1 Monteagle " " " " 1 199 1 1 5 4 McClure " " " " 1 100 1 23½ 2 4 Wicklow " " " " 1 100 1 2 Algona S. Renfrew Adam Prince Wilno 1 100 1 2	Methuen	"	**	"		2	150			1	1
Cardiff. Haliburton " " 3 486 1 1 4 2 Monmouth Haliburton " " 8 998 6 5 Bangor Hastings J. R. Tait, L'Amable 6 497½ 1 1 1 1 Carlow " " " " 1 111 1 2 1 2 Dungannon " " " " 1 199 1 1 1 1 Faraday " " " " 1 100 1 1 3 3 Herschel " " " " 1 100 1 1 1 1 1 Mayo " " " " 1 100 1 1 1 1 1 Monteagle " " " " 1 199 1 1 5 4 McClure " " " " 1 100 1 23½ 2 4 Wicklow " " " " 1 100 1 2 Algona S. Renfrew Adam Prince Wilno 1 100 1 2	Cavendish	Peterboro'	James Wilse	on. Kinmo	ınt	1	73				
Monmouth Haliburton " " 8 993	Cardiff	Haliburton	**	44		2	259				5
Bangor	Galway	Peterboro'	1					1	1	_	2
Carlow " " " " 1 111 1 2 Cashel " " " 1 111 1 2 Dungannon " " " 1 99 1 1 Faraday " " " 2 351½ 1 16 6 3 Herschel " " " 4 421 1 1 3 3 Limerick " " " 1 100 1 1 1 1 1 Mayo " " " 1 5 1 Monteagle " " " 5 667 1 1 5 4 McClure " " " 1 119 2 Wicklow " " " 3 315 1 23½ 2 4 Wollaston " " " 1 100 1 2	monmouth	manbur wii				0	330				ű
Cashel " " 1 111 1 2 Dungannon " " " 1 99 1 1 Faraday " " " 2 351½ 1 16 6 3 Herschel " " " 4 421 1 1 3 3 Limerick " " " 1 100 1 <td></td> <td></td> <td>J. R. Tait, I</td> <td>'Amable</td> <td>•••••</td> <td></td> <td></td> <td>• • •</td> <td></td> <td>1</td> <td>1</td>			J. R. Tait, I	'Amable	•••••			• • •		1	1
Dungannon " " " 1 99 1 1 Faraday " " " 2 351½ 1 16 6 3 Herschel " " " 4 421 1 1 3 3 Limerick " " " 1 100 1 1 1 1 Mayo " " " " 1 100 1 1 1 1 Monteagle " " " 5 667 1 1 5 4 McClure " " " 1 119 2 2 Wicklow " " " 3 315 1 23½ 2 4 Wollaston " " " 1 100 1 2			"	"				•••		i	2
Herschel " " " 4 421 1 1 1 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1						1					1
Limerick " " " 1 100 1	Faraday										3
Mayo " " " 1 5	Limerick										1
Wollaston " " " 1 100 1 2 Algona S Renfrew Adam Prince Wilno 1 100 2			"	"				1	5		ī
Wollaston " " " 1 100 1 2 Algona S Renfrew Adam Prince Wilno 1 100 2		1	1					1	1	5	4
Wollaston " " " 1 100 1 2 Algona S Renfrew Adam Prince Wilno 1 100 2	**** 1 1	.,	1			3		···i	231		4
Algona, S Renfrew Adam Prince, Wilno 1 100			"								2
Brougham Brudenell " " " " " 3 303 1 2 1 5	Algone S	Renfran	Adom Dring	wilno		1	100				2
Brudenell " " " 5 500 1 21 5		46	"	"	•••••	3		i.i	2	i	
	Brudenell	, ,,		46		5		1	21	5	• • • •

Appendix No. 13.—Continued.

Township.	District or County.	Agent	i.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Burns Grattan Griffith Hagarty Jones Lyell Lyndoch Matawatchan	" " Nipissing	Adam Prince ,Wi		9 1 5 1 2 5 2	1,233 897 91 500 189 302 559	1 1 2	$\begin{array}{c} & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$	3 4 1 1 4 3 2	1 3 2 2
Radcliffe Raglan Richards Sebastopol Sherwood	66 66 66	66 66 66 6 64 66		6 8 14 3 5	$\begin{array}{c} 800 \\ 960\frac{1}{2} \\ 1,726 \\ 247 \\ 432 \end{array}$	··· 1	231	9 5 7 1 3	8 1 2
Algona, N Alice Buchanan (pt) Fraser Head Maria McKay (pt) Petawawa Rolph Wilberforce Wylie (pt)		D. B. Warren, Pe	embroke " " " " " " " " " " " " " " " "	1 2 1 1 1 3	93. 182 208 100 100 394	1	8	1 1 1 1 2	2 1 1 1 1
Calvin Cameron (pt) . Lauder Mattawan Papineau	Nipissing	Robert Small, Ma	attawa	1 3 5	100 393 574	 1 1	9		$\begin{bmatrix} 1\\2\\\\4\\2 \end{bmatrix}$
Korah Parke Prince	Algoma	B. J. Rothwell,	Sault Ste. " Marie		162 156 723	 <u>.</u>	80	1 2 5	2 1 5
Aberdeen add. Galbraith Lefroy Plummer add.	66 66 66 66	Thos. Buchanan, " " " " "	Thessalon.	3 1 3 	$ \begin{array}{r} 548\frac{1}{2} \\ 162\frac{1}{2} \\ 475 \end{array} $	1 1 	2¼ 6½	 1	6 6 1 1
St. Joseph 1s'd	**	W. E. Whybourne	, Marksville	12	1,267			11	1
Merritt		R. J. Byers, Mass	se y	5	765	1	39		1
Blake Conmee Crooks Dawson Road. Dorion Gillies Gorham Lybster Marks.	Thunder Bay. " " " " " " " " " " "	H. A. Keefer, Por	" " " " " "	8 34 6 40 5 6 25 7 24	$egin{array}{c} 1,120 \\ 5,021 \\ 1,033 \\ 4,207 \\ 749 \\ 961 \\ \hline{2},877 \\ \hline{2} \\ 1,066 \\ \hline{2} \\ 3,816 \\ \hline \end{array}$	 2 6 1 1 1	$72 \\ 354 \\ 179\frac{1}{2} \\ 6\frac{1}{2} \\ 1$	4 20 33 6 5 18 7 11	8 12 1 12 7 6 8 13
McIntyre McGregor	"	"	"	3 7	1,126	··i	3	5	3

Appendix No. 13.—Continued.

			•						
Township.	District or County.	Ag e	ent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
O'Connor Oliver Paipoonge,N R	Thunder Bay.	H. A. Keefer, I	Port Arthur, .	7 10 1	$^{1,126rac{1}{2}}_{1,613}$	3 1	$158\frac{1}{2}$	7 10 1	9 8 9
"SR	. "	"	**	8	986			9	4
Pardee	"	"	"		070		2201		$\frac{9}{1}$
Pearson Scoble	**	"	" .	6 16	$\begin{array}{c} 970 \\ 2,311 \end{array}$	$\begin{vmatrix} 2\\2 \end{vmatrix}$	$\begin{array}{c} 320\frac{1}{2} \\ 88 \end{array}$	6	10
Strange	"	"	44	10	$1,597\frac{1}{2}$	3	117	5	13
Ware (pt)	"	**	"	38	6,974			2	4
Atwood	Rainy River	William Camp	hell Stratton						
Blue	""	" Camp	oon, otheron,	4	479	i	82	6	5
Curran	"	• •	"	5	72 8	3	86	4	5 3 3
Dewart	"	"	"	3	480			3	3
Dilke			"	3	406	2	44	3 4	9
Morley Morson	**	"	44	5 53	$\substack{646 \\ 8,1061}$	13	10 576 1	34	9
McCrosson	**	"	**	9	$1.319\frac{3}{4}$	2	175°	13	7
Nelles	"	**	"	12	1,938	5	131	11	8
Pattullo	44	"	**	6	629	3		5	8 5
Pratt	"	"	"	7	$1,118\frac{1}{2}$	2	62	9	1
Rosebery	"	"	"						
Shenston	"		"	1	160	4	48	1	6
Spohn		"	"	16	$^{2,535}_{2,257}$	$\begin{vmatrix} 3\\4 \end{vmatrix}$	$\begin{array}{c c} 127 \\ 227 \end{array}$	15 13	1 3
Sutherland Sifton	"	"	44	14	$\frac{2,237}{1,474}$	3		10	
Tait	"	. "	66	2	322	5		3	12
Tovell	"	"	**	4	637	7	3871	3	5
Worthington	"	46	"	2	276	3		2	5
Aylsworth	Rainy River .	Alex. McFayde	n Emo	1	162	1	20	1	2
Barwick	"	"	т. т.	1	118				2 2
Burriss	"	"	"	$\hat{5}$	8191	10	345	3	17
Carpenter	**	"	"	11	1,808	4	104	14	4
Crozier	"	"	"	6	1,025	6		7	7
Dance	"	"	"	22	$3,596\frac{1}{2}$				7
Devlin				2 5	$\frac{202_{2}^{1}}{706}$	7 3		3	7 9
Dobie Fleming	"	**	"	1	796 160	9	126	o	1
Kingsford	"	"	**	10	1.521	6	329	9	8
Lash	"	"	"	2	244	7		3	11
Mather	"	"	"	2	335	1	49	2	8
Miscampbell.	**	"	"	10	$1,517\frac{1}{2}$		$79\frac{1}{2}$		
Potts			"	5	$763\frac{1}{2}$		100	3	
Richardson Roddick	"	"	"	7	1,117	3	160	9	9
Woodyatt	"	"	"	2	244			2	
								1	
Aubrey	Rainy River	R. H. Pronger,	Dryden	12	$1,586\frac{1}{2}$	1	114	10	10
Eton	"	"	"	5	6914			2	6
Langton Mutrie	"	"	44	1 15	$\frac{158\frac{1}{2}}{2,267}$	··· •	91	12	7
Rugby	EL	**	66	10	2,201	1		1	7 2 4
Sanford	44	"	66	4	632	i	40	3	
Southworth	"	"	"	3	390	1	2		5
Temple	"	"	**	9	1,380			1	3
Van Horne	"	"	"	2	166	3		1	3
Wabigoon			"	38 6	5,821 <u>1</u> 701			6	9
Wainwright	-]	J.		1 0)	791	, 1	ี อฮฐิ	, 0	. 9

Appendix No. 13.—Concluded.

Township.	District or County.	Agent.	No. of persons located.	No of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Zealand	Rainy River	R. H. Pronger, Dryden	. 8	867	1	233	3	7
Melick Pellatt	66	W. L. Spry, Kenora	· 12	-,2	3 1		17 9	
Blezard Capreol Hanmer	Sudbury	J. A. Lemieux, Blezard "Valle	y 16 38	2,2591			3 6	
Broder	Sudbury	J. K. MacLennan, Sudbury.	. 13	1,648	1 1 3		2 3	5 7 1
Chapleau Dill. Garson Neelon	Sudbury	66 64 66 66	17 17	$1,262\frac{3}{4}$ $2,395\frac{1}{2}$ $2,382\frac{1}{2}$		7 175	₂ 5	6 5 10
Rayside	" C II	TO A TWO LA TWO	2		•••		1	5
Casimir Dunnet	"	E. A. Wright, Warren	$\begin{pmatrix} 7 \\ 4 \\ 6 \end{pmatrix}$	787 $810\frac{1}{2}$	$\begin{array}{c c} 1\\3\\1\end{array}$	5	1	6
Hagar Jennings Kirkpatrick	Nipissing	" " " " " " " " " " " " " " " " " " "	77	1,044	2 1 2 2	163 39 12		6 5 3
	Sudbury	J. A. Philion, Sturgeon Falls	s. 10	1,232	1	$17\frac{1}{2}$ 80	• • • •	5 22
CosbyGrant	Sudbury Nipissing	44 . 44	3	324 357	1			8
Macpherson Martland Springer	Sudbury	66 66 64 66	14	2,762	···i	412	1	7 22 16
Abinger	Lennox and							
Clarendon Denbigh	Frontenac	Charles Both, Denbigh	$\begin{vmatrix} 2 \\ 3 \end{vmatrix}$		• • •	• • • • • • •		
Canonto, S	Addington	66 46 66 46	3	495				3
" N Miller (pt.) Palmerston	"		i	50			1	
(pt)	"						1	1
Airy Finlayson Murchison	Nipissing	Unattached	. 6	817	3	51		2
Sabine	**	44	9	1,388	i	10	i	i
			1,379	194,760	296	9,7531	796	947

W. C. CAIN, Clerk in Charge. AUBREY WHITE,
Deputy Minister.

Appendix No. 14.

Statement of Municipal Surveys for which instructions issued during the 12 months, ending October 31st, 1910.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.
1	E. T. Wilkie	680	Jan. 18, 1910	To survey the town line between the townships of Nepean and North Gower, in the County of Carleton, and to plant permanent monuments at all points of intersection with concession lines or side roads running thereto through either township.
2	J. J. McKay (Tyrrell & McKay)		July 27, 1910	To survey certain concessions, road allowances, etc., formerly in the township of Barton, now in the City of Hamilton.
3	Thomas H. Dunn.	681	Oct. 26, 1910	To survey the boundary road allowance between the townships of Osnabruck and Cornwall, and to have the said boundary marked by permanent stone or iron monuments at the expense of the municipality of the township of Osnabruck, in the County of Stormont.
4	S. E. Farley	682	Nov. 16, 1910	To survey the original road allowance between lot 30, concession 2, Ottawa Front, and lots lettered J., K., L., M., and N., concession A., Rideau Front, in the township of Nepean, in the county of Carleton, and to define said road allowance by permanent monuments on each side thereof.

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 15.

Statement of Municipal Surveys confirmed during the 12 months ending October 31st, 1910.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.	Date when confirmed under R.S.O., 1897, Chap. 181, secs. 10- 15 inclusive.
1	C. D. Bowman	664	Feb. 5, 1908	tween the township of Waterloo, in the county of Waterloo, and the township of Guelph, in the county of Wellington, from the northeasterly angle of the township of Waterloo, southerly along the easterly limits of lots 97, 98, 99 and 100 of the German Company Tract of Waterloo, and to mark by stone or other permanent monuments at the several corners in the easterly limit of the said township of Waterloo, and also at each end of the several concession lines of the township of Guelph abutting on said boundary be-	
2.	Ernest G. Barrow	665	May 2, 1908	original allowance for road between the broken front and the 1st concession of the township of Barton, in the county of Wentworth, known as the base line and now within the limits of the City of Hamilton, said survey to be made from the intersection of the said base line with the allowance for road between lots Nos. 4 and 5, in the said township of Barton known as Ottawa Street, to the westerly terminus of such base line, and that durable monuments be placed marking the limits of	Jan. 19, 1910.
				the original allowance for road between the above points. To survey the lines of the streets in the town of Niagara, and to mark the same by suitable monuments in such a manner as the proper lines thereof may at any time be laid down upon the ground. To survey the concession line and road between the 10th and	
		The second secon		and road between the 10th and 11th concessions of the township of Winchester across lots Nos. 12, 13, 14, 15, 16, and the west half of lot No. 17, in the 10th concession of the township of Winchester, or as far as may be necessary to find original or undisputed monuments on each side, and to plant permanent monuments to mark the said road on each side.	e e u. 20, 1910.

Appendix No. 15.—Concluded.

Statement of Municipal Surveys confirmed during the 12 months ending October 31st, 1910.— Concluded.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.	Date when confirmed under R.S.O., 1897, Chap. 181, secs. 10- 15 inclusive.
5.	Alex. Niven	675	Oct. 5, 1909	To survey the southern boundary, of the town of Niagara, and to define the same by durable monuments.	
6.	Frank E. Patterson .	677	Dec. 8, 1909	To survey the boundary lines of the road known as McArthur Avenue, running in an easterly direction from the Rideau River, a distance of about one mile, through the village of Eastview, being the centre of lot No. 7, junction gore, Township of Gloucester, and to plant stone or other durable monuments at the front angles of lots and blocks fronting on McArthur Ave. within the limits of said village of Eastview.	Oct. 14, 1910.
7.	Maurice Gaviller	678	Dec. 23, 1909	To survey the side road between lots 9 and 10 in the 12th concession of the township of Nottawasaga, and to mark the said road on either side by permanent monuments.	Sept.16,1910.
8.	E. T. Wilkie	679	Dec. 27, 1909	To survey the concession line between the 8th and 9th concessions, of the township of Hinchinbrooke, from lot 12 south to lot 8, and to define the same by permanent boundaries.	Nov. 18,1910.

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys in progress during the twelve months ending October 31st, 1910.

-				
No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount Paid,
1	Mar. 19, 1910	A. G. Ardagh	To survey islands in Georgian Bay in front of Harrison & Shawanaga	\$ 4,000
2	Mar. 21, 1910	D. Beatty	To survey islands in the Georgian Bay, in front	
3	Apr. 18, 1910	C. H. Fullerton	of Conger & Cowper To survey outlines of townships surrounding Night Hawk Lake and to south thereof, Dis-	2,500
			trict of Nipissing	3,300 5,000
5	Apr. 22, 1910	L. R. Ord	To survey islands in the Georgian Bay, in front of Wallbridge	3,500
6	May 2, 1910	Speight & Van Nostrand	To survey Base and Meridan lines, District of Algoma	11,750
7	May 3, 1910 .		To survey outlines of townships, D'stricts of	
8	May 10, 1910	A. Niven	Nipissing and Sudbury To survey town plot at Superior Junction,	5,500
9	May 11, 1910	J. Hutcheon	District of Kenora	1,000
	May 17, 1910		bury To survey outlines of the townships north of	10,000
			Aylmer, District of Sudbury	4,50
	May 27, 1910		To survey township outlines north of the township of McNish, District of Nipissing	3,000
	June 9, 1910 July 5, 1910		To traverse lakes in District of Algoma To survey part of the township of Alexandra, District of Sudbury	2,800
14	July 17, 1910	A. D. Griffin	To survey residue of the Townships of Maisonville and Benoit, District Nipissing	3,20
15	Sept. 2, 1910	E. Seager	To survey timber berths 1, 2, 3 and 4, District	400
16	Aug. 19, 1910	T. B. Speight	of Kenora	
17	Dec. 7, 1910	T. D. Green	To traverse Gun and Sand Lakes and survey	450
18		L. V. Rorke, Inspector of Sur-	the islands therein, District of Kenora	1,000
19	Mon 92 1010	veys	Inspection of surveys	2,200
13	mar. 25, 1910	C. H. Fullerton	in, District of Nipissing	0,00
				66,100
		1		

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 17.

Statement of Crown Lands surveyed, completed and closed during the 12 months, ending October 31st, 1910.

_					
No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of acres.
_					
1	May 17, 1909	C. H. Fullerton	Survey of lots 5 and 6, Town- ship of James, District of		,
2	May 18, 1909	Speight & Van Nostrand	Nipissing Survey of Base & Meridian lines, Districts of Sudbury and	491 45	. .
^	[] 90, 1000		Algoma	750 00	
			Survey of Township of Wabigoon, District of Kenora	1,289 98	22,917
4	May 20, 1909	F. W. Paulin	Survey of timber berths, District of Thunder Bay	61 75	
5	May 27, 1909	H. J. Beatty	Survey of outlines, Temagami		
6	May 31, 1909	W. & D. Beatty	Forest Reserve	1,235 43	-
			District of Nipissing Survey of Township outlines,	2,102 77	51,524
'	may 51,18	J. Hutcheon	Districts of Nipissing and Sud-	, ,	
8	June 1, 1909	J. S. Dobie	Survey of Township outlines,	3,420 00	-
			Mississaga Forest Reserve Survey of Township outlines,	856 73	
			Mississaga Forest Reserve	1,436 15	
- 1			Survey of Township outlines, Mississaga Forest Reserve	3,323 34	
11	July 22, 1909	C. H. Fullerton	Survey of Township outlines, District of Nipissing	1,427 60	
12	July 26, 1909	J. W. Fitzgerald.	Survey of Township outlines,		
13	Oct. 4 1909	J. H. Burd	District of Sudbury Survey of timber berths E., F.,	466 47	
			1. and J., District of Algoma	1,572 77	
		·	Survey of timber berths, District of Rainy River	4 20	
15	Dec. 31, 1908	L. V. Rorke	Survey of outlines of Townships, Temagami Forest Reserve	1.838 47	
16	April 28, 1910	Cavana & Watson	To survey Township outlines,	-	
17	April 28, 1910	Lang & Ross	District of Sudbury To survey township outlines	5,055 00	
18	May 4 1010	DeMorest Stull &	District of Sudbury To survey Township outlines,	5,769 62	
	1	Low	District of Sudbury	5,038 95	
			To survey outlines of Townships, Mississaga Forest Reserve	5,272 44	
20	May 25, 1910	J. S. Dobie	To survey outlines of Townships, Mississaga Forest Reserve	5,042 59	
21	May 2, 1910	H. J. Beatty	To survey Township outlines,	0,012 03	
	,		West of Godfrey, District of Sudbury	6,130 30	
1	1	1	To survey timber berths in Dis-	841 18	
23	Aug. 11, 1910	A. L. Russell	To survey lots 18 to 24, con line	ŀ	
24		L. V. Rorke, In-	1-2, Dawson Road	45 70	
		spector of Surveys	Inspection of surveys	195 93	
	1	1	Re blazing timber berths 151,	100 00	
			157, 145 and 139	512 59	
)1	E. H. Harcourt & Co	Printing maps	7,706 35	

Appendix No. 17.—Continued.

Statement of Crown Lands surveyed, completed and closed during the 12 months. - Centiqued.

INO.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amoun paid.		No. of acres.
		Rice Lewis & Sons C. E. Henderson.	Mounting maps	387 91	80	
		Map Specialty Co.	berths S. 41, 42 and 43 Express, iron posts, Matheson & Porcupine	23 4 87	20 60 50 95	
		on-		\$63,238	51	

GEORGE B. KIRKPATRICK,

Director of Surveys.

AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 18.

SURVEY OF BASE AND MERIDIAN LINES, DISTRICTS OF ALGOMA AND SUDBURY, 1909.

TORONTO, 27th December, 1909.

SIR,—We have the honor to submit the following report on the survey of certain base and meridian lines in the Districts of Algoma and Sudbury, made by us during the past summer under instructions from your Department, dated 18th May, 1909.

Upon receipt of the instructions we immediately proceeded to make arrangements for supplies, of which nearly six tons, exclusive of camp equippage, were required. With nine men from Toronto and vicinity, we left for Woman River Station, on the Canadian Pacific Railway, on 1st June, and upon our arrival were joined by eleven other men from various parts of New Ontario. Additions to the party were made from time to time as occasion required, the maximum force at any time being thirty, all told. The work was in charge of T. B. Speight, O.L.S., assisted by T. D. le May, O.L.S.

The instructions state that the point of commencement is marked by "an iron post on the north side of the right of way of the Canadian Pacific Railway, about a mile and a half east of Woman River Station, on the line between Townships numbers 18 and 19, as partially outlined by O.L.S. E. Stewart, which post is distant 76 links north of the centre of said right of way and marked 18 M. on the east and 19 M. on the west side, said post is also distant 91 chains and 37 links from the south-west angle of Township 18 as surveyed by O.L.S. Stewart." Upon careful search it was found that the post referred to had been removed and its accompanying wooden post destroyed by fire, and it was necessary to determine the point by measuring from the iron post and point of old spruce post still remaining on the south side of the right of way, verifying these as to original position by measuring from the five mile post on O.L.S. Stewart's meridian.

A beginning was made on 3rd June from the initial point so established, and the work was prosecuted continuously, with the exception of one week, which was lost in re-outfitting after the destruction of about half of our camp effects and instruments by a forest fire which swept in from the north-west on 11th June.

The first meridian was run from the above point of commencement north for about sixty-five miles to the base line run by O.L.S. A. Niven in 1899. It may here be noted that this base line forms the division between the systems of "six-mile townships" to the south and "nine-mile townships" to the north. At the forty-eighth mile post on this meridian, a base line was run east about nineteen miles, to a point on the Ground Hog River about five miles north-east from the Hudson's Bay Company's trading point known as Flying Post; and, from the same mile post, about twelve miles west, to connect with the Township of Paul near its north-east angle. These two lines are referred to herein as the "first base line."

At the seventy-second mile post on O.L.S. Niven's base line, being about one and three-quarters miles west of the termination of the sixty-five mile line referred to, the first meridian was continued twenty-seven miles north along

the boundary between the Districts of Algoma and Sudbury and from its north end a base line, referred to herein as "third base line," was run west about twenty miles to the western terminus of the season's work. From the eighteenth mile post on the north twenty-seven miles of the first meridian line, referred to herein as the "second base line," was run west for a distance of eleven miles. At the ninth mile post on the third base line, lines were run north and south respectively for a distance of nine miles, and referred to herein as the "second meridian."

From the eighteenth mile post on the same base line meridians were run similarly north and south respectively nine miles, and termed herein "third meridian."

The meridian lines are run due north astronomically and the base lines due west (or east) on chords of parallels of latitude, those to the south of the Niven base line being chords of six miles in length, and those to the north of that line, nine miles long. A wooden post of the most durable material, within reasonable distance, was planted at the end of each mile on the lines south of the Niven base line, and in addition, iron posts one and one-quarter inches in diameter were planted alongside the wooden posts at the end of each sixth mile in that tract. On the lines north of Niven's base line, the interval between wooden posts was made one and a half miles, and between iron posts nine miles. On each wooden post and iron post the number of the mile it represented was carefully marked on the side nearest the initial point of the line. Where a corner occurred in: a lake or other natural feature, precluding the planting of posts, the post was planted upon the nearest suitable point of land and upon the line run, the distance of such post from the true corner being entered in the notes and marked upon the post. In all cases where wooden and iron posts are planted side by side, the iron post indicates the intended corner. All lines were well opened out and properly blazed.

Frequent astronomical observations, records of a number of which are appended, were taken for the purpose of verifying the course of the lines run, but owing to a series of accidents to the instruments it was impossible to note frequently the magnetic variation, the average declination being about four and a

half degrees west.

A careful watch was kept for indications of the exploration line run by P.L.S. Duncan Sinclair in 1867, but the repeated fires which have swept over this region in the interval have rendered it impossible of positive location at this point. Certain marks which we believe to define the line in question were seen and noted, and we have shown the position of these upon the accompanying map as "Probable location of Sinclair's line."

The return journey was made by way of the Kapuskasing and Trout River

canoe routes to Chapleau, which was reached on 25th September.

GENERAL FEATURES

All the country embraced by this survey lies in the valleys of the Woman, Ridout, Pishkanogami, Ground Hog, and Kapuskasing Rivers, a total breadth of thirty-nine miles from east to west and one hundred and one miles from north to south being included. Generally speaking, the surface is rolling, and, in places, hilly, some of the hills reaching an altitude of two hundred feet. To the south of the clay belt, the southern boundary of which was met about ten miles north of Niven's base line and trends thence in a north-westerly direction,

the soil is of inferior quality for agricultural purposes, but in the southern twenty-two miles of the work the surface indications are such as to attract prospectors for iron.

Rivers, streams and lakes abound, particularly in the southern part of the work and numerous swampy areas were seen. Fire has swept, within the past twenty-five years, over nearly all the southern half of the tract covered by the survey, and as a consequence there is little timber of value now standing. In the remaining part, including the clay belt, less damage has been done by fire.

SOIL.

As above intimated only a comparatively small part of the survey lay within the clay belt, the remainder comprising stony, rocky and sandy soil. The clay belt itself is not here of as good quality as that to the north, but in the vicinity of the Kapuskasing there is a fair sized area of excellent land, and the proportion of good soil increases to the north and north-east.

TIMBER.

To the south of Pishkanogami Lake the timber is nearly all of second growth, but small areas of the original growth, which had escaped the fire, were seen.

A tract of probably fifty or sixty square miles from the Ridout River eastward and from the tenth to the fifteenth miles on the first meridian was fire-swept during our survey, and no timber of value remains. On the first meridian between Pishkanogami Lake and the first base line, a number of groves of white and red pine of good quality were seen. On the first base line, both east and west of the first meridian, a fair quantity of spruce and poplar, suitable for pulpwood, and banksian pine and tamarac for railway ties, was found.

In the fifth and sixth miles of the first base line east of the first meridian, groves of red and white pine occur also at a point on the Pishkanogami River, about two miles north from the mouth of the Muskego River, there is a grove of red pine of good quality, ranging up to twenty-four inches in diameter. In fact, taking into account both quality and quantity, this region is the most promising for white and red pine that we have noted in the James Bay watershed.

Along the valley of the Kapuskasing River, spruce, poplar, birch and tamarac with occasional groves of banksian pine and scattered cedar, are found. The poplar and spruce are of good quality, and capable of supplying timber for local purposes.

To the west of the fifteenth mile on the third base line the country has been visited by fire, probably fifteen or twenty years ago, and the growing timber is of little value at present.

WATER.

The whole district is well watered by rivers, streams and lakes, with water

of good quality.

Rapids and small falls on the Woman, Ridout, Pishkanogami and Kapuskasing Rivers are sufficient to supply power for mining and other local purposes. The most important of these falls noticed was on the Pishkanogami River, about three miles down stream from the lake of that name, which forms a natural reservoir, the lake itself being about twenty-five miles in length and from one-half to two and a half miles in breadth. The next falls of importance is on the Kapuskasing River, about three miles down stream from Kapuskasing Lake; the latter having an area of probably at least five square miles.

MINERALS.

In the south twenty-two miles of the first meridian, surface indications of iron ore were frequently seen and already a number of prospectors were operating. In our opinion it is a promising field and probably will be found to extend eastward to the point on the Woman River where development work has been in progress for more than two years.

In the remainder of the work no indications of economic minerals were noted, but the dense undergrowth gave little opportunity for observation. Outcroppings

of rock were seen at intervals, chiefly of granite, in the northern part.

GAME.

Moose were very numerous, and bear were seen occasionally. Small game was scarce. Fish were abundant in all the main streams and larger falls. On the Pishkanogami River speckled trout were particularly plentiful as were pickerel in Goose Lake.

GENERAL REMARKS.

A much smaller portion of agricultural land was met with in this season's work than has usually been the case with our contracts during several years previous but this is due to the fact that only a fringe of the great clay belt was encountered. The work will, however, be of considerable value for a number of reasons, among which are: the service in connecting adjacent detached systems of survey, the necessity for locating mineral claims, particularly in the southern part, and the knowledge gained respecting the territory to be crossed by the Canadian Northern Railway, surveys of which are now in progress to the north of Ground Hog Lake and across the first base line east of the meridian.

We have the honour to be,

Sir,

Your obedient servants,

(Signed) Speight & VanNostrand.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 19.

SURVEY OF OUTLINES OF TOWNSHIPS NORTH OF LAKE HURON, DISTRICT OF ALGOMA.

THESSALON, ONTARIO, December 15th, 1909.

Sir,—I beg to report that in accordance with your instructions dated June 1st, 1909, I have completed the survey of Township Outlines, in, and adjacent to, the western portion of the Mississaga Forest Reserve.

In reaching the starting point of the survey, I used the well-known canoe route from Wakami Siding on the main line of the Canadian Pacific Railway to the

Mississaga River via the Kapuskasing and Wenebegon Rivers.

The survey was commenced on the afternoon of July 31st at the 6th mile post on the meridian line run by O.L.S., A. Niven, in 1902, this point being the north-east corner of Township 3.E. From this point the survey was continued without interruption until the middle of October when unfavorable weather made it impossible to continue. On October 15th there was twenty inches of snow on the ground, and work under these conditions with a summer outfit became impossible. I therefore broke camp and came out to the Algoma Central Railway, where I discharged my men for the time being. The weather moderated after this, however, and by November 1st the snow had about disappeared. I therefore took a small crew of men and returned to the point where work had been suspended, and completed the survey.

Your instructions were followed as closely as possible in performing the survey. It was found necessary, however, to run a few of the lines in the opposite direction to that mentioned in the instructions. This course was rendered necessary on account of the great difficulty in making long moves for the whole party. The lines which were reversed are as follows: The north boundary of Township 5 E., east boundary of Township 3 F, east boundary of Townships 3 H. 4 H, 5 H, north boundary of Township 3 G, and the north boundary of Township 22, Range XII. The field notes in all cases were entered in the order in which the lines were run and the posts were all numbered from the south towards the north and from the east towards the west, with the exception of the east boundary of Township 202, on which the posts are numbered from the north towards the south.

The lines were all well cut and blazed and good, durable posts were planted wherever required. If possible, mounds of stone were erected at the posts. Iron posts were erected at each of the township corners with the designation of the township marked thereon with a cold chisel. In some cases, however, where the corner came near an iron post planted last year, a new iron post was not erected. The usual wooden post was planted at the intersection of the lines and the distance measured and recorded to the iron post planted on the line run last year. The measurements to these posts are all shown on the plan, and also in the field notes. Wherever the end of a mile came in a lake or river, a post was planted on the nearest shore and the chainage marked on the post with a scribing iron. Bearing trees were marked wherever possible, and all marks were made with a proper timber scribe. All lakes and rivers were carefully triangulated and the calculations are entered in the proper place in the field notes.

TIMBER.

The greater portion of the territory covered by the survey is untouched by fire and contains timber of great value. The prevailing timber is white and red pine, spruce, balsam, cedar, white birch, yellow birch and maple. White pine of good quality is to be found scattered all over the area surveyed and in some places

the growth is very heavy.

The following report on each township separately will give an idea of the location of the most valuable timber and of the burnt areas, and also an approximate idea of the relative value of the various townships as far as could be seen from the survey lines. 3 E. This township is not damaged much by fire. Red and white pine are very plentiful in the north-east corner. There is also considerable pine in the north-west corner and along the Mississaga River, except a small area which was over-run by fire about fifteen years ago. In the southern portion of the township there is considerable yellow birch and maple of poor quality, but with white pine scattered throughout. A portion of the south-west corner was burnt over about fifteen years ago. Throughout the whole township there is a great deal of fine spruce, also much balsam and white birch. The pine and pulpwood are of very great value.

4 E. Fire over-ran the south-west corner of this township some years ago and probably twenty-five per cent. of the total area has been burnt over, and contains no timber of any value. The remainder is heavily timbered with pine, spruce, balsam, birch, cedar, etc. The pine especially in this township is very valuable.

5 E. This township is very much the same as 4 E. About twenty-five percent. has been swept by fire and is growing up with a dense growth of underbrush of no value whatever. The burnt area is mostly in the north-east corner. The

pine, spruce, etc., in this township are very valuable.

3 F. This township has been nearly all burnt over by a fire which occurred about forty years ago. The southern portion contains no timber of any value except an occasional clump of trees that escaped the fire. Along the north boundary there is a good growth of timber of considerable value. West of the Aubinadong River there is some good pine and spruce. There is also a fair quantity of spruce with pine scattered throughout on the east side of the Aubinadong River. On account of the ravages of fire, however, this must be considered a poor township, although what timber there is appears to be of good quality.

4 F. Very little of this township has been damaged by fire, there being a small area on the east side and another on the west side having an area of about three square miles in all that has been burnt. The remainder contains pine, spruce, balsam, cedar and birch. There is a large quantity of pine in this township and

the spruce is plentiful and good. This is a very fair township.

5 F. The northern part of this township has been burnt over and about forty per cent. of the total area has been fire swept, only an occasional clump of green timber having escaped. On the remainder of the township the timber is very valuable. White pine and spruce occur in large quantities and the other timber common to the country is very much in evidence. This is a very good township in spite of the damage done by fire.

196 and 202. Only the line between these townships was run, so that it was possible to obtain very little information regarding these two townships. The line runs through a good growth of mixed timber containing much pine and spruce for three and a half miles south from O.L.S. Niven's Base Line, which was crossed near the 84th mile. From three and a half to five miles there is nothing but

second growth, birch and poplar, this area having been burned over about forty years ago, and the fire appears to have run for a long distance east and west of the line and probably belongs to the same area of brulé which crosses 3 F and 3 G, as the growth appears to be of about the same age. From the Garden River, which crosses near the fifth mile to the north boundary of Townships 195 and 201; the timber is mostly maple and birch of poor quality, with considerable pine, spruce and cedar scattered throughout.

- 3 G. This township has been badly damaged by fire. Fully sixty per cent. of the area has been burnt over some forty years ago. The northern portion of the township has escaped, but the timber is largely hardwood of poor quality. There is considerable pine, spruce and cedar throughout, increasing in quantity towards the north-east corner of the township. Taken as a whole this is not a good township.
- 4 \hat{G} . A small area of brulé exists on this township along the canoe route from the Aubinadong River to Aubahagama Lake. It covers probably three square miles. Otherwise the timber has not been damaged and in some parts is very valuable. North of Aubahagama Lake there is a very large amount of valuable pine and spruce, although the pine is not noticeable from the lake, as the timber immediately surrounding the lake is largely white birch and hardwood. Southeast of Aubahagama Lake there is considerable maple and birch of inferior quality, with pine and spruce throughout. Near the south-east corner of the township there is a considerable quantity of white pine to be seen from the lines. Probably one quarter of the area of this township is water, as two large lakes, Aubahagama and Saymo Lakes, are probably within its limits. This is a very good township, especially the north half.

5 G. The north-east corner of this township has been burnt over about fifteen years ago. Otherwise the township is very valuable. The north-west corner of the township has a fine growth of pine and spruce and elsewhere throughout the unburnt portion of the township both pine and spruce occur in large

quantities. This is a very valuable township.

3 H. A considerable portion of the south-east corner of this township has been burnt and contains no timber of value. There is a large amount of hardwood on this township, but the quality is poor. There is a large amount of spruce, balsam, cedar, etc., and considerable pine scattered throughout. This township is not nearly as valuable as others within the limits of the survey.

- 4 H. There are two small areas of brulé occurring on the west side of the township, otherwise there is a good growth of timber. The best pine seen occurs along the north boundary and the quantity is large. In the southern part there is a great deal of white and yellow birch and maple with balsam and spruce. There is scattered pine throughout, but the quantity does not appear to be large. The northern portion of this township is very good, but the southern part is much less valuable.
- 5 H. This is a very valuable township. It is practically undamaged by fire and the timber growth is very heavy. White pine is very plentiful along all the boundaries of the township and in the north-east corner it is particularly valuable. Much fine pine could be seen from the south boundary as well, and as far as could be seen during the progress of the survey, pine is fairly well distributed over the entire township. There is also a large amount of very fine spruce, balsam and birch. Taken as a whole, this is the best township within the limits of the survey.

 $T^{\prime}p$ - 22, R- XI. This township has been touched by fire in three places and the area burnt appears to be about five square miles. There is a large amount of maple

and birch of poor quality, with pine, spruce, balsam and birch distributed throughout. There is a large amount of pulpwood on this township, and some good groves of pine, but it is not nearly as valuable a township as others seen during the season.

- T'p- 22, R- XII. This is a very good township. Along the east boundary there is a good growth of pine and spruce, also along the south boundary. In the north-west corner there is a heavy growth of pine, and, in fact, more or less pine can be seen all over the township wherever an extended view could be obtained. There is also a large amount of pulpwood and considerable hard wood. This appears to be one of the best townships seen during the season.
- T'p-23. R-XI. As this township is now being lumbered by the Algoma Commercial Company, I do not consider it necessary to report. I may say, however, that the east and north boundaries of this township were run some years ago, presumably under the directions of the Algoma Commercial Company. These lines do not coincide with the lines run by myself under instructions from your Department. I have, however, connected these lines with my survey, and their location is shown on the plan by a dotted line.
- T'p-23, R-XII. There is some good pine along the south boundary of this township, especially for a mile and a half cast of the Goulais River. The east boundary passes through some good pine scattered among spruce and hardwood. There is a good grove of red pine near the small lake at the north-east corner. Along the north boundary there is not much pine to be seen. There is a large quantity of fine spruce and white birch, with some very large cedar west of the Goulais River, although not much pine can be seen from the lines, there is some very fine pine inside the township. Outside the limits of the survey there is some very fine pine north of Townships 5 G and 5 H.

GEOLOGY.

The prevailing formation in Laurentian. The country drained by the Mississaga and Aubinadong Rivers and their branches is composed of Granite, Gneiss and Syenite, intersected by numerous dikes of fine grained Trap. large number of these dikes were examined, but no signs of mineral were found in any of them. The contacts between the dikes and the country rock were invariably tight and devoid of vein matter in any form. Around Aubakagama Lake and on some of the islands in the same Huronian rocks occur. These consist chiefly of diorite and a form of slaty schist. In the valley of the Goulais River and its branches Huronian rocks are more in evidence, although they appear to consist mostly of various eruptions in a Granite formation. Owing to the heavy growth of underbrush and moss the rock exposures are not as frequent as the rough nature of the country would lead one to expect. The only place where frequent exposures were to be seen was in the large brule, which occurs up the Aubinadong River. Here the formation is all Granite with numerous trap dikes, as already stated. The country is very rough and exceedingly difficult to travel in. rock ridges appear to run in all directions with very few valleys that continue for any distance in one direction. In addition to the rock ridges there are numerous hills of boulders and gravel of glacial origin.

There is practically no land fit for agricultural purposes.

WATER AND WATER-POWERS.

A reference to the plan will show the various river systems better than can be done in a written report. However, I may say, that the eastern part of the territory is drained by the Mississaga River and its tributary the Aubinadong River, with its two main branches, the East and the West. The Mississaga River is a large stream, from four to six chains in average width. Within the limits of the survey occur numerous small falls and flat rapids, as well as the famous Aubrey Falls. Here there is a total fall of over one hundred feet and a magnificent water-power could be developed. I understand that the Hydro-Electric Power Commission have already reported on this power. It is doubtful if the other falls and rapids below Aubrey Falls could be used for water power purposes. Just above O.L.S. Niven's Base Line, a long series of continuous rapids commences, which extends as far south as Squaw Chute in the Township of Haughton, a distance of over thirty miles. These rapids can all be run by skilful canoemen, but the numerous boulder and gravel flats in the river bed will make the driving of timber an expensive matter.

The Aubinadong is a swift, rough stream, flowing over beds of sand and gravel. It is about one hundred feet wide where it joins the Mississauga River. No portages occur from this point, until about two miles south of the north boundary of Township 4 F, where a portage of about eight chains occurs on the east side of the river. Below this portage, however, it is necessary to pole a canoe almost the whole distance, making travel up stream very slow and tedious. Above the forks in the Aubinadong the East Branch contains no heavy falls, but there is a long series of shallow flat rapids which must be poled up. The West Branch is much rougher. A falls of at least fifty feet occurs about a mile north of Township 5 F, where a good local power could be developed, but the quantity of water is not large in the dry season. Both branches of this river could be used for driving timber, although considerable improvements in the way of cribs, slides, etc., would be required. The West Branch is worse than the East in this respect. At the head of the West Branch, however, there is a large lake crossed by the north boundary of the Forest Reserve, where an abundant supply of water could be stored for timber driving or water-power purposes.

The Garden River takes its rise in Saymo Lake. It is a stream nearly a chain wide where it leaves Aubakagama Lake, and flows with a swift current over sand and gravel bottom. Abundant water for timber driving purposes could be stored in Aubakagama and Saymo Lakes.

The Goulais River and its branches drain the whole of the territory west of the Mississaga Forest Reserve and also parts of Townships 4H and 5H. The Goulais River is a large stream with a fast current and numerous rapids. When crossed by the north boundary of Township 23, Range XII, it is about two chains wide, with very little current. About a mile below this point there is a considerable fall where a fair power could be developed.

Aubakagama Lake is the largest body of water in this region. It is a beautiful body of clear water with numerous islands. Saymo Lake, Mashamoga Lake and Sisabie Lake, are also considerable bodies of water. In the northern part of Township 5 G there is a fairly large lake which drains to the West Branch of the Aubinadong. There are also some fairly large lakes in Township 5 H, which run to the Goulais River.

FISH AND GAME.

This section of the country would form an ideal resort for tourists. All the lakes mentioned above abound in speckled trout of large size. The Goulais and Garden Rivers, with their branches, are splendid trout streams. Aubakagama Lake has both speckled trout and grey trout. Moose, deer and wolves are very plentiful. Fresh beaver work was seen in many places, and marten and mink are plentiful. This country does not appear to be much frequented by trappers.

The magnetic variation averages about three degrees, forty minutes west, but in a number of places there is a great deal of local attraction. Wherever any pronounced local attraction occurred the particulars were noted in the field notes.

Astronomical observations were taken wherever possible and the details

entered in the field notes.

Enclosed herewith are field notes, plan and timber plan, also account in triplicate, all duly attested.

I have the honour to be,
Sir,
Your obedient servant,
(Signed) JAMES DOBIE, O.L.S.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont. .

Appendix No. 20.

SURVEY OF TOWNSHIP OUTLINES IN THE MISSISSAGA FOREST RESERVE, DISTRICT OF ALGOMA.

ORILLIA, January 26th, 1910.

SIR,—Pursuant to instructions received from you bearing date of the 25th day of May, 1909, for the survey of Township outlines in the Mississaga Forest Reserve, in the District of Algoma, we proceeded to make such preparations as were necessary to enable us to carry out the work outlined therein, and on June 24th following our canoes left Biscotasing for the journey south. The route followed in reaching the site of the work was up the Spanish waters, through Canoe Lake, and over the divide into the waters of the Mississaga, passing through Upper Green Lake. This route is a good one, having comparatively few obstacles to travel and being composed mostly of lakes, but owing to its tortnous character is somewhat lengthy in comparison with the straight line course. The portages were found to be well travelled and in good condition. Not being familiar with this part of the country and not having been fortunate enough to secure any one who had been previously over the route, travelling was perhaps a trifle slower than would have been the case had we been possessed of an experienced guide, as there are many water stretches along the way which open out invitingly and seemingly beckon the traveller from the narrow but not at all straight paths that lead to the main river stretch of the Mississaga. We successfully avoided these enticing byways, however, and arrived at the crossing of O.L.S. Niven's first meridian on the Mississaga River on the 30th instant. Here we divided our party, sending some down the river with supplies and with the remainder packed down Niven's meridian to the post at VI. M. and there commenced our first base line west from that point.

Owing to cloudy weather conditions we were unable to procure an observation at the above starting point and were forced, upon this account, to carry the line on by using the line run east from the same point as a basis to obtain bearing. It was not until we had run about four miles in this way that an observation could be procured, and then the line was found to be bearing twenty-three minutes too far to the south. At the IV. M. post the line was deflected to a course due west, and thereafter observations were secured at each meridian intersection and the back checks in all cases were found to be satisfactory. At the measured points of six miles, twelve miles, eighteen miles and twenty-four miles on the base line meridians were turned north and south, those running south ending at the base line run by O.L.S. Niven in 1902, and their northerly continuations being carried to their intersection with our second base six miles to the north of our first base line. A peculiar accident in regard to this first base line is the manner in which it intersects the meridian run by O.L.S. Niven thirty miles west from our starting point, the base line coming out only one and one-half links to the north of the fron post planted on this meridian at VI. M. The second base line was commenced from the chained distance of six miles north from the first base line measured on the fourth meridian, and run west to Niven's meridian of 1902, and east to the meridian passing through our starting point, for the first base. posts were planted on both base and meridian lines, with the mileage marked from I. to V., dating on the base lines from the meridian to the east, and on meridian lines from the base line to the south. In cases where the mileage points fell in a lake or other position unsuitable for planting a post, posts were planted at the nearest suitable point and marked with the distance dating as aforesaid. intersections of base and meridian lines, or as near such intersections as circumstances would permit, with the exception of the intersection of the second base line with Niven's meridian of 1902, forming the north-westerly angle of Township 4 D, iron posts were planted marked with the names or designating numbers of the adjacent townships. Wooden posts were also planted alongside these iron posts. The extremely rough and precipitous nature of the country passed over by these lines renders accurate chaining impossible and always liable to error. The transit can work within much narrower limits of error than can be assigned to the chaining and we are of the impression that more accurate work could be done by using instrumental measurements from one transit station to another to determine intersection points than by ordinary chaining. The lines were well blazed and cut out for long sights from hill-top to hill-top, where station pickets were planted firmly and rock mounded where necessary, so that exact line points could readily be picked up if required in the near future.

TOPOGRAPHY.

The country traversed by this work is generally of an extremely rough and hilly character, level ground being of rare occurrence and unimportant in extent. There appear to be no well defined ridges, the surface being almost wholly occupied by more or less rounded hill masses, often presenting a precipitous face, and rising from one to three hundred feet above the valley-like depressions surrounding their bases. No matter in which direction one travels, if a straight line be fol-

lowed, the same continuous succession of hill after hill is encountered. Owing to the dense forest growth, views of any wide extent are not usual, but in some instances, especially along the second base line where the line enters the fire area, a wide sweep of country could be seen and its general character observed. These hill masses are so tightly packed together that in many instances the lakes present so attenuated an appearance as to be at first sight mistaken for rivers.

WATER AREAS.

The main drainage of the area considered is through the Mississaga River and its main tributaries the Abinette and the Wenebegon. The Mississaga enters this area from the east, crossing Niven's first meridian flowing in a south-westerly direction, at a distance of about 11/4 miles southerly from the north-easterly angle of Township X, thence it turns north-westerly, crossing the north boundary of said township about ten chains east of the 11 M. post and looping back again at 111 M. the base line crossing at the latter point just above Hanging Stone Chute. It's general character in this stretch is that of a narrow lake-like expansion with only moderate current. From Hanging Stone Chute the course of the river is southwesterly, crossing, paralleling and recrossing the south boundary of Township X. in a flat loop near the south-westerly angle of said township. This stretch has fairly strong current and numerous rapids. At about fifty chains west of the meridian boundary of Township X and 4 A, the river takes a north-westerly course through a marshy flat to its junction with the Abinette, the latter river entering from the north at a point about two miles south from the centre of the north boundary of 4 A. The course through this marshy flat is tortuous and the current swift. From the Abinette the river turns slightly south of west, passing a large island in its course and crossing the meridian boundary between 4 A and 4 B at about 23/4 miles. Rapids occur at the island, the notherly channel being used as the canoe route. From the boundary 4 A, 4 B, the general trend is slightly north of west till Green Lake is reached. This lake has an extension north-easterly and south-westerly of about 11/4 miles by about 3/4 mile and touches at its westerly extremity the meridian boundary 4 B and and 4 C. It lies almost completely north of the river channel, the latter flowing through it but a short distance along its southerly shore. One fall occurs on the last mentioned stretch at about 3/4 mile westerly from the boundary 4 A-4 B, and is avoided by a portage on the south bank. From Green Lake the river takes a southerly dip, crossing the meridian # B-4 C near 23/4 mile from here after passing the falls on a westerly course at about a mile west from the said meridian, the river widens and enters the eastern extension of Lake Minnesinaqua, a considerable body of water extending across Township 4 C and the south-westerly corner of 4 D. The river again debouches at 11/2 miles on a southerly course across the base line on the southerly boundary of 4 D and turns westerly, crossing Niven's second meridian at a distance of about a mile south of the south boundary at 4 D, thence northerly again, crossing the meridian to the east, flowing directly along it for some distance and finally turning west at Aubrey Falls. The Wenebegon enters from the north about a mile south from the base line and a quarter of a mile east from Niven's meridian just below a bad rapid on the Mississaga. The water of the Mississaga is clear and dark, carrying little sediment and flowing usually over a sandy or gravelly bottom. exceptions the valley is narrow and hedged in by rugged hills. Owing to the lack of rain during July and August the water in this as well as its tributary streams was very low, so much so that our party readily crossed dry shod on the stones at

the head of Hanging Stone Chute late in September, and the shallow water on the rapids sometimes necessitated light loading the canoes. The second base line crossed the Abinette River about two chains above the head of a falls of about five feet, and this also was crossed by walking on the stones. This latter river is about one chain and seventy-five links wide at this point and flows through a level flat of about half a mile in width where crossed by the base line. This flat is sharply bounded where crossed by this base line on its easterly side by a vertical wall of rock about thirty feet in height and forming a remarkably straight line to the north. The Wenebegon River is crossed by the first base line at V. M. where it is one and a quarter chains in width with a moderately swift current, has clay banks extending about four feet above low water, and is turbid. The channel is here very crooked and flows through a marshy flat of nearly half a mile in width which is apparently all overflowed at the high water stage of the river. Back of the river rim the ground rises a few feet above the marsh for a distance of two or three chains, forming a fringe of small elm, black ash and alder. This stream is important as traversing the main pine area in the district covered by the survey. As we did not, however, have a canoe on this river we are unable to describe its character between the first and second base lines, the latter of which it crosses between IV. M. and V. M. north of 4 D. Numerous smaller streams traverse this area, draining into the Mississaga or, in the southerly part, into the branches of the White River, some of which will doubtless form valuable adjuncts in carrying out future lumbering operations.

The chief lake area is the Minnesinaqua, already mentioned, a fine body of water with numerous sand beaches and well timbered shores on the south, and containing a number of well-wooded islands. One of the latter is crossed by the meridian line 4 C-4 D in the narrow part of the lake, and the base line crosses near its southerly extremity, the southerly bay of the lake, between mileage V. M. and WI. M. 4 C. The whole country surface is dotted by smaller lakes of greater or less extent, many of which are crossed by the lines. A somewhat large lake crossed by the second base line between I. M. and III. M. on the north boundary of 4 D contains an island crossed by the line which presents a peculiar appearance, having been cleft so deeply from the north as to be almost cut in two. A considerable chain of lakes also extends southerly from the Mississaga, following closely along the third meridian and form a fairly well travelled canoe route to the south. This canoe route commences by a portage of about a mile leaving the Mississaga a short distance west of the meridian 4 B-4 C and crossing the first base line about one and a half miles west of the first meridian. Another canoe route apparently of less importance, leaves the Mississaga up the small marshy creek entering just south of first base line and a short distance east of the first meridian, 3 A-W. Canoe trips are also made north from the Minnesinaqua through Round Lake, but as we did not have any very definite information regarding the location of the latter lake, and the creek entering the former lake was found to be too shallow for loaded canoes, we found it preferable to pack over the lines. Numerous portage trails intersect the country, but are apparently only travelled by the Indians on their hunting expeditions, are poorly marked and not nearly so well travelled as the trails made by the moose.

TIMBER.

Almost the whole of this area shows the effect of destructive fires at dates more or less remote. That part lying north of the Mississaga River and east of the second meridian appears to have suffered worst in this respect from recent

conflagrations, the forest here showing an average growth of from twenty to thirty years. Much of the country south of the river and over the whole area shows streaks and patches, sometimes of considerable extent, of brulé of the above character. In many places through this brulé, which contains a thick growth of spruce, jack pine, white birch and balsam and to a lesser extent of tamarac, seedlings of white and red pine are beginning to gain a foot-hold, and will doubtless, if properly protected, again gain the supremacy once held by this species in the forest growth. South of the river and west of the second meridian the country is largely occupied by timber of larger growth and of the same species mentioned above. Next to the white and red pine, the jack pine probably stands first in importance and much of this is fit for lumber and ties. Some fine timber of this latter species is to be found along the meridian boundary of 3 A-3 B, tall straight trees of a diameter extending to 18 inches. Timber of the same character is plentiful on the first base line westerly from II. M. 3 B to the lake at the meridian intersection and southerly along the meridian 3 B-3 C to the lake at III. M.; and also in the tract cut by the first base line west from II. M., 4 C to Lake Minnesinaqua. Again along the meridian 4 C-4 D, northerly from IV. M., a similar quality of jack pine is met with. Associated with the jack pine in the larger timbered area there is a considerable quantity of spruce running to 14 inches in diameter and also some white poplar. White birch, though much in evidence, seldom exceeds ten or twelve inches in diameter, and does not appear to be of much commercial value. Balsam in many places forms a thick undergrowth, and thickets of moosewood and hazel serve effectually to screen any object more than a few feet away. Scattered red pine and white pine up to 24 inches in diameter, in about equal proportions, are met with from mileage 1 to 31/2 on the north boundary of Township W, and also in small bunches and scattered trees along the westerly boundary of the same. would appear that this township would afford sufficient pine to render lumbering profitable. Again, along the northerly boundary of 3 C, extending from III. M. to Lake Minnesinaqua there is a good sprinkling, chiefly of white pine, ending in a thick pinery at the shore of the lake. Along the meridian forming the boundary 3 C-3 D, pine, scattered or in small bunches, is also met with. Scattered trees also occur in the area lying between the southerly shore of Lake Minnesinaqua and its river outlet and the first base line. There is scattered pine in considerable quantity along the meridian line 4 C-4 D from IV. M. northerly and westerly along the second base line to the large lake at I. M. 52.51 chains. Travelling east along the second base line scattered trees and small blocks are met with at intervals as far east as III. M. on the north boundary of 4 B. By far the most important pine area passed through, however, lies adjacent to the Wenebegon River in the westerly part of Township 4 D. This area is entered on the first base line at about III. M. on the south boundary of 4 D and continues with slight interruptions across Niven's second meridian, forming the westerly boundary of the said town-ship. On the second base line this area is entered at IV. M. about half a mile east of the Wenebegon and continues across the west boundary of 4 D. Streaks and patches of burn cut this tract, but it still presents a fine appearance of almost solid pinery, and from the second base, where a good view could be obtained to the south, it extended as far as the eye could reach. The average of the pine seen in this block would appear to run about 14 logs to the thousand, and the timber of good quality, sound and generally free from defects, with the exception of a little stump rot. The white pine would probably average well over 60% of the whole. The Wenebegon, cutting the tract centrally, leaves little to be desired in the way of transport for the logs.

A fire area of so recent date that little growth has yet been made was passed through, apparently near its southerly edge, by the first base line. Commencing just west of the second meridian bounding 4 A-4 B this tract continues for nearly two miles along this base line and extends northerly to the Mississaga. occupied by a tangled slash of windfall timber very difficult to traverse and presents the usual desolate appearance characteristic of such a condition. There was also a fire of considerable proportions raging north of the Mississaga in the early part of the summer, dying out probably in August. This was confined mostly to the brulé country, and would appear, from such observations as we could make, to have worked from the river northerly to a short distance beyond the second base From several hill points on the latter line its northerly limit could be seen in rounded patches of burn in the otherwise green country. The greatest continuous distance passed through in this burn by the lines was on the second meridian, 4 A-4 B, from a short distance south of IV. M. to the second base, with slight interruptions. This fire was not in the nature of a clean sweep, but of the usual patchy character, leaving green areas surrounded by burn. In some places it was severe enough to form a slash, but generally the trees were simply fire killed. This burn also extends along the second base line at intervals in streaks and patches from V. M., 4 A to the westerly side of the lake at V. M., 4 B. remarkable recuperative powers of the forest growth were well evidenced through this fire area, as when our second base line was cut through it in September, less than two months after the fire, there was found to be a lusty growth of young birch and poplar more than eighteen inches high rising from the blackened ground.

Soil.

Speaking broadly, the district is devoid of agricultural possibilities, the thin soil covering the rocks being merely the pulverized sand of the rocks themselves, and the very few exceptions to the rule are contained within very narrow limits of area. A flat of inconsiderable extent is crossed by the third meridian, 4 B-4 C, and extends from about seventy chains south of the Mississaga to the river itself. This flat contains clay alluvium and is covered with small poplar, tamarac and willow. A level, sandy plain covered with small jack pine extends from the creek at 59.59 chains on the 4th meridian, 3 C-3 D to about 2½ miles. The above are the most notable exceptions met with and will serve to illustrate the general character of the country as regards its soil constituent. Its one great use is apparently as a nursery for timber growth.

ROCKS, MINERALS.

From force of circumstances little time can be devoted to the study of rock formations when conducting survey operations. The country, however, is generally overlaid by grey or pinkish rock of granitoid texture, apparently granite of massive structure. This rock weathers to a light grey, or nearly white, and the rectangular cleavage characteristic of the granites was noticeable in many places, the rough blocks lying about the surface, or easily detached from neighboring rock faces, being found most convenient for cross piling about the station pickets in exposed places. There appears to be little or no mica associated with the quartz and feldspar of these rocks, but it contains a dark mineral constituent which is probably hornblende. Numerous greyish or greenish black dykes of trap or diabase are found cutting through the granite, and these were especially numerous

across the burnt section on the second base line between I.M. and II.M., 4 C., running from a few inches to a foot or more in width. Conglomerate outcrop was also reported on the hillside rising from the westerly shore of the first lake crossed by the 2nd base line westerly from the 4th meridian or at mileage IM. 30 chains north boundary, 4D. These rocks appear to be barren of minerals of economic importance. A little specular iron was met with in narrow seams or gashes along the first six miles of the first base line. A milky quartz vein about three feet wide in red coarsely crystalline rock, with a strike north-easterly and south-westerly, occurs on the 2nd base line about eight chains east from the northwest corner of 4C., and it was again found twenty or thirty chains southerly from this point and east of the 4th meridian, when cutting across the rough hills of this locality. A cursory examination did not expose any metallic minerals in this quartz. Another quartz vein of similar character to the above, and about 18 inches in width, was crossed by the second base line on the westerly slope of the hill descending to the easterly shore of the lake cut by the line at V.M. 36.29 chains on the north boundary of 4A. This latter vein does not appear to be mineralized.

The compass seldom shows any marked variation from a mean declination of 5½ degrees west, and is remarkably steady in alignment for a region of this character. This mean was obtained as the average of a large number of observations.

GAME-FUR.

Large numbers of moose frequent this section and could be seen almost any day during the hot weather along the rivers and small lakes. The trails of this animal are everywhere through the woods, leading usually from one lake to another or to the river, and so well beaten that were it not for the absence of axe marks they might be mistaken for well travelled portages. In the northerly part, and especially on the brule section east of the 2nd meridian, red deer are also plenti-The thick nature of the bush, however, gives little opportunity to see the animals themselves, but on one occasion a doe evidently with fawns close by came within a few feet of the tents when several members of our party were in or about them, and showed no signs of alarm. Signs of bear are abundant, and occasionally the fiendish music of the wolf packs strikes the ear with its unwelcome sound. Abundant indications of the one-time abundance of the beaver are present, but only in a very few places along the easterly part of the 2nd base line were the animals found to be present. Their number appear to have been almost decimated over this region. Little signs of the smaller fur-bearing animals were met with, although the country appears to be regularly hunted by a number of Indian families, as the winter camps of these people were observed in several places.

We have the honor to be,

Sir,

Your obedient servants,

(Sgd.) CAVANA & WATSON.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 21.

SURVEY OF OUTLINES OF TOWNSHIPS IN THE MISSISSAGA FOREST RESERVE, DISTRICT OF ALGOMA.

LITTLE CURRENT, ONT., December 1st, 1909.

SIR,—I have the honor to submit to you the following report on the survey of the outlines of Townships 1A, 1B, 1C, 1D, 1E, 1F, 2A, 2B, 2C, 2D, 2E and 2F, in the Mississaga Forest Reserve, in the District of Algoma, under instructions from your Department, dated Toronto, May 25th, 1909.

Proceeding by the way of Wenebegon Siding, on the main line of the Canadian Pacific Railway, and by the Kapuskasing River, from the height of land, thence into Wenebegon River route to the Mississaga River, we arrived at our starting

point on the 29th of July.

Agreeable to instructions, I commenced the work by running south, astronomically, 6 miles between townships 2E and 2F, from O.L.S. Niven's 72-mile post on his base line of 1902; thence west astronomically between 1F and 2F to intersect the line which I ran from the 78-mile post on the said base to form the west boundary of Township 2F; through an error this line is not due south. This line was produced 75 chains and 74 links to intersect the north boundary of township 195. I then continued south between 1E and 1F from my 6-mile corner on the meridian from the said O.L.S. Niven's 72-mile post 6 miles, 58 chains, 30 links, to intersect the north boundary of Township 188.

Returning to the said six-mile corner, I ran east astronomically, a base line between 1E and 2E, 1D and 2D, 1C and 2C, and 1B and 2B, 1A and 2A, to intersect P. L. S. Herrick's line of 1857. At intervals of 6 miles and 77 links on above base line, I ran north to intersect the said O. L. S. Niven's base, and south

to intersect the north limits of Townships 182, 176, 169 and 163.

I reopened and reblazed the Herrick line on the north side of my base line 5 miles, 45 chains and 70 links, to his 18-mile post, and on the south side of it 6 miles, 38 chains and 23 links to the north-east angle of Township No. 157, which is identical with the south-east angle of Township 1A. Mile posts were also planted on the Herrick's line. O. L. S. Niven, it appears from notes supplied me, has produced the Herrick line to connect with his base of 1902.

At every mile a wooden post 6 inches square was planted and marked in Roman numerals, cut with a knife; the mileage reckoning from the east boundary of the township on the base line, and reckoning from the north boundary of each

township on the meridians.

At each township corner an iron post made from pipe 1¼ inches in diameter was also planted, and cut thereon with a cold chisel the township numbers on the sides facing the respective townships. The wooden posts at the township corners were similarly marked. Where a mile came in a lake a post was planted on the shore and marked thereon the miles and chains. Two bearing trees were marked and noted at every post.

The lines were well cut out and blazed on the side of the tree facing the line,

also on the sides facing the direction of the line.

The lines were run with a Solar compass carefully adjusted.

The country is very rough and broken in many places, and generally is rolling and hills from 40 to 400 feet high. There is very little level country, and practically no swamp.

The rock is principally granite, intermingled with serpentine and conglomerates.

The soil is a rich, sandy loam and gravel, but so broken with rock and boulders as to be unfitted for anything but timber.

The Mississaga River and its tributary, the White River, and its many branches run through the townships, and afford excellent capacity for driving logs and other timber. The streams all run swiftly, but no falls sufficient for large water power were met with.

Lake Kirkpatrick is a beautiful stretch of water about 6 miles long and from ½ mile to 1½ miles wide. The Indians call it Anuminabing, which comes from anumina, the Indian word for Vermilion paint, which the Hudson's Bay Company sold to them.

The timber is white and red pine, jack-pine, white spruce, white birch, balsam, poplar, cedar, black birch, maple, black ash, small tamarac and black spruce.

The white pine is from 12 to 36 inches and the red pine from 12 to 28 inches in diameter, and is mostly of good quality. There is considerable of it in all the townships, except in the brulé portions. In a few places the white pine is scrubby, but of fair size. The greatest amount of pine to the acre was found along the north boundaries of 1C and 1D. From a mountain on the south side of Lake Kirkpatrick a splendid view of the country was obtained to the north, north-east and north-west, and showed great areas of pine in those directions. From some estimates taken the cut of pine would, in many places, average from 10 to 20 thousand feet, board measure per acre.

An average of about one-third of the northern portion of each of the town-ships, 2B, 2C, 2D, 2E, and the south-east half of 1A, is an old brulé and appears to contain little merchantable timber. There is some fair-sized scattered pine through it which has survived the fire.

The fire of May, or early June, this season is said to have come from the north down through 2D, and extends also for about from one to two square miles in each of Townships 1D and 1C and 2C, but has done little or no damage to the white and red pine. It has, however, killed the other timber.

The jack-pine and white spruce is pretty evenly distributed, and except in the brulé is from 8 to 18 inches in diameter.

The cedar is of fair quality. The black birch and maple is found principally along the southern limit of the south tier of townships.

The country is an ideal one for the sportsman. Moose and red deer are found at nearly every lake, while a great many of the streams and small lakes are fairly alive with large speckled trout. The small lakes in the south-east corner of Township 2C are particularly noted for speckled trout. Wolves are very numerous. One Indian in our party shot several.

The chief guide of the party, John Undewawadin, a Biscotasing Indian, died suddenly while with us about the 14th of September, and was buried by some of the party, including his brother, Joe Wessigence, at the little graveyard on the east shore of Kin-di-og-a-ming Lake, which is about two miles north of the northwest angle of Township 2B. Lung trouble was apparently the cause of his death.

Great care was taken to extinguish all our fires.

Accompanying this report is the timber map, showing in colors the different areas of timber, also field notes, plan and account.

The canoe routes shown on the plan were drawn from careful sketches made while on the ground, and after ascertaining from the guides, as well as possible, those which I did not see.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) T. J. PATTEN,

Ontario Land Surveyor.

Appendix No. 22.

SURVEY OF TOWNSHIP OUTLINES, DISTRICT OF ALGOMA.

THESSALON, ONT., October 29, 1910.

SIR,—In accordance with your instructions, dated May 25th, 1910, I have completed the survey of certain Township Outlines in and adjacent to the Mississaga Forest Reserve, and beg to submit the following report:

I commenced the survey at the iron post planted by myself in 1909, at the north-east corner of Township 23, Range XII. From here I ran due north, astronomically, a distance of 12 miles, 1.60 chains, to the second base line run by me in 1908. At the six-mile post of this meridian line, I ran due west, astronomically, a distance of 6 miles, 3.80 chains, to the meridian line run by T. B. Speight, O.L.S., in 1898. Returning to the six-mile post mentioned above, I ran a base line due east, astronomically, as a continuous line, a distance of 30 miles, 42 links, to the meridian line run by A. Niven, O.L.S., in 1902. This base line crossed the second and first meridian lines, respectively, run by me in 1908. From a point six miles east of my second meridian line of 1908, a meridian line was run north, astronomically, to intersect my second base line run in 1908, and south, astronomically, to my second base line, run in 1909. From a point six miles east of my first meridian line of 1908 a meridian line was run both north and south to intersect the second base line run by myself in 1908 and 1909, respectively.

The meridian line run by A. Niven, O.L.S., in 1902, was produced north astronomically to intersect my second base line in 1908, and this base line was produced east astronomically a distance of 6 miles from the 12-mile post planted in 1908, the mile posts being marked from XIII. M. to XVIII. M., so as to make the numbering continuous on this line. At a point 1.51 chains east of the XVIII. M. post on this line, I intersected a line run during the present season at a point 81 links north of a post marked VI. M. As my instructions contained no reference to this line, and stated that I was to continue the second base line of 1908, as far as the 18th mile post, I did not plant a post at this intersection, but recorded the details in my field note-book.

A the end of every mile a substantial wooden post was planted and a bearing tree marked wherever possible. If stones were available a mound of them was placed around the post. When the end of a mile came in water, a post was planted on the nearest shore and the chainage marked on the post. The posts and bearing trees are all marked with a scribing iron, and all the details entered in the field notes. At each township corner the post was marked with the designation of the township, on the side facing the township.

Eight iron posts were planted, each one being at a township corner, except one, which was planted at the 18th mile post of the production of the second base line of 1908. Seven iron posts were unfortunately lost in a canoe accident on the Goulais River, and could not be recovered. Each township corner, however, except one, is either marked by an iron post at the corner, or else an iron post planted on a previous survey, is very close to the corner. The distance to each one of these posts from the corner is recorded in the proper place in the field notes.

Only one corner has no iron post nearer than six miles, and that is at the north-east corner of Township 23, Range XIII. Here a substantial wooden post

was planted and a mound of stones built around it.

Throughout the survey, the lines were well cut out and properly blazed, and in all cases were run with a transit. Astronomical observations were taken whenever possible, and are recorded in the proper places in the field notes. Every precaution was taken to have the lines so well blazed and marked by stones piled around pickets and posts, that it would be practically impossible for any series of fires to entirely obliterate them.

The survey throughout was difficult, owing to the very rough nature of the country and the poor canoe routes. I had the great advantage, however, of having been over practically the same ground during the seasons of 1908 and 1909.

The country is well timbered with a mixed growth of spruce, balsam, white birch, cedar, jack pine and white pine. The white pine occurs more or less throughout the whole territory, but is more plentiful in the southern parts and appears to give place to large jack pine in the northerly parts. A large proportion of the territory covered by the survey has been burnt over in previous years. The timber plan, which accompanies this report. shows the limit of these burnt areas, as well as they could be estimated from the lines. A short summary of the timber resources of each township is given in detail.

Township 23, Range XIII.—There is a burnt area of apparently about 2,000 acres in the south-east corner of this township. The remainder is covered with a good growth of spruce, balsam, white birch, cedar and white pine, of good quality. The pine occurs in scattered bunches, while the amount of spruce available for pulp wood is very large. The Goulais River crosses the south-eastern corner of this township, while the small streams on the west side of the township run to-

wards some other river, probably the Chippewa.

Township 23, Range XIV.—There is an area of about four square miles of brulé in the north-east corner of this township. The timber is very much the same as in the last township, while pine is scattered throughout, the best being in the north-west corner of the township. There is a large amount of spruce suitable for pulpwood. The greater part of the township is drained by branches of the Goulais and Chippewa Rivers, while the streams crossing the north boundary appear to flow towards the Batchewaung River.

Township 22, Range XIII.—There is very little burnt country in this township. The spruce is very valuable, and while pine is scattered throughout, being most plentiful along the east side of the township. This township is drained by

the Goulais River and contains a number of fairly large lakes.

Township 22, Range XIV.—There is a considerable area of brulé in the north-west corner of this township. Spruce, balsam, white birch and white pine are the prevailing varieties of timber, the spruce being the most important. As in the township previously mentioned, the white pine is scattered. Nearly all of this township is drained by the Goulais River, although a branch of the Batchewauing River rises in the north-west corner.

Township 6H.—This township contains about a thousand acres of brulé along the north boundary near Goulais Lake. There is a large amount of good spruce, with balsam, birch, etc. There is a good growth of white pine in this township, the best being in the south-east corner and along the trail running south-east from Goulais Lake. This is the best area of white pine seen during the season. The township contains a few fair-sized lakes and is drained by the Goulais River.

Township 7H.—There are two large areas of brulé in this township. One is in the north-east corner and covers from 1,000 to 2,000 acres. The other is older and occurs east of Goulais Lake. It covers an area of about 5,000 acres, although the exact extent is hard to estimate. The pine in this township is scattered, and the best timber is spruce, which occurs in fairly large quantities along with balsam, white birch, cedar and jack pine. This township is drained by the Goulais River, although a few small streams on the east side flow towards the Aubinadong River.

Township 6G.—About two-thirds of this township have been burnt over. There is some very good white pine along the west boundary, together with spruce, balsam, cedar, etc. The west branch of the Aubinadong River runs through this township.

Township 7G.—The boundaries of the burnt areas in this township are hard to estimate, but fire appears to have run over at least two-thirds of the township, leaving scattered bunches of green timber here and there, but none of any great extent. Jack pine, spruce, balsam and white birch are the prevailing varieties of timber, with white pine scattered here and there. The best timber is in the northeast corner and along the west boundary. The west branch of the Aubinadong River runs through this township.

Township 6F.—Probably forty per cent. of this township has been burnt over, leaving only scattered clumps of green timber here and there. Along the west boundary of the township there is a large amount of jack pine, suitable for making railway ties, also a large amount of spruce, balsam and white birch. The white pine is scattered and the quantity seen from the lines is not large. The Aubinadong River and its branches drain this township.

Township 7F.—This township has been overrun by at least two large fires and one-half the total area has been burnt, if not more. There is some good white pine and large jack pine in the north-west corner. There is also a large amount of spruce, balsam and white birch, and this class of timber prevails throughout the unburnt portions of the township. The amount of jack pine of marketable size is very large. A tributary of the west branch of the Aubinadong River runs through this township.

Township 6E.—This township has also been overrun by fire, and probably one-third of the total area has been burnt. There is some good white pine along the Aubinadong River. Along the west boundary the prevailing timber is jack pine of splendid quality, with spruce, white birch, cedar and white pine occurring in fair quantities. The east branch of the Aubinadong River runs through this township.

Township 7E.—From thirty to forty per cent. of this township appears to have been burnt over. The best timber is jack pine, of which there is a large quantity. There is also much spruce, suitable for pulpwood, while pine occurs in small quantities scattered throughout. The east branch of the Aubinadong River runs through this township.

Township 7D.—Along the west and north boundaries of this township there is no sign of any visitation by fire. The timber along these lines is jack pine,

spruce, balsam, White birch, with scattered red and white pine. There is a large amount of jack pine of a size suitable for railway ties, and a considerable quantity of excellent pulp timber. The south and east boundaries of this township were not surveyed by me, and I cannot, therefore, speak of the timber along these lines. The west side of this township is drained by the Aubinadong River, while the streams on the east side appear to flow towards the Wenebegon River. As in previous years, little or no agricultural land was seen. The country is very hilly and in places almost mountainous, much broken with high granite ridges. There are also a great number of hills and ridges of gravel and boulders of glacial origin. In fact, the valleys are almost entirely filled with glacial drift.

The Goulais River and the branches of the Aubinadong River are the important streams. They are not very large, however, as in each case the streams rise very close to the limits of the survey. There are no water powers of any im-

portance, although the rivers are all rough and rapid.

The prevailing geological formation is Laurentian, consisting of Granite Syenite and Gneiss ridges, much cut with dikes of diabase. No deposits of economic minerals were observed during the survey, although some claims have been staked for iron in the south-west corner of Township 22, Range XIII. These, I did not visit. In this section of the country, however, there are some areas of Huronian rocks and a few pieces of banded magnetite float were picked up along the lines. Townships 22 and 23, Ranges XIII. and XIV., might be worth prospecting for iron.

Moose, deer and wolves are plentiful, while frequent signs of all the ordinary fur-bearing animals were seen. Partridges were very plentiful, notwithstanding

the fact that they had almost disappeared.

The Goulais River and the west branch of the Aubinadong River are full of speckled trout of very large size. The lakes tributary to these streams also afford splendid sport.

The Magnetic Variation averages about 3 degrees 50 minutes west.

Accompanying this report are a plan mounted on cotton; Timber Plan, Field Notes and accounts in triplicate.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) JAMES S. DOBIE.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 23.

TOWNSHIP OUTLINES, DISTRICT OF ALGOMA.

LITTLE CURRENT, ONT., September 15th, 1910.

Sir,—I have the honour to submit to you the following report on the survey of Township Outlines in the Mississaga Forest Reserve, in the District of Algoma, performed under instructions from your Department dated Toronto, May 9th, 1910.

Proceeding by way of Old Wakami Siding, mileage 94, west of Cartier on the Canadian Pacific Railway, I arrived on the ground the 27th of June and started the work by running north from O.L.S. Niven's 6 mile post at the south west angle of Township 7C, 12 miles 73 chains and 78 links to Lake Wenebegon.

Commencing again at the witness post 1 chain and 10 links north of O.L.S. Niven's 18th mile at the south-west angle of Township 6D, a continuous line was run due east astronomically a few chains less than 30 miles between townships 5D and 6D, 5C and 6C, 5B and 6B, 5A and 6A, Y and Z, and intersected the said O.L.S. Niven's meridian 1 chain and 62 links south of his 18 mile post at S. E. angle of Z. I might say that through an oversight this line was run from the above mentioned witness post instead of from the 18 mile distance at south-west angle of township 6D referred to.

From the intersection of this line which I ran east with O.L.S. Niven's meridian at 1 chain, 87 links north of his 6 mile post at the south-east angle of Township 6D, I ran south between Townships 5C and 5D 6 miles, 1 chain, 37 links to O.L.S. Watson's base line of 1909.

From each 6 mile corner on my base line running east above referred to I ran north and south to intersect at about 6 miles the said O.L.S. Niven's base line on the north and O.L.S. Watson's on the south. That between Townships 6A and 6B was run north to connect at about 3 miles O.L.S. Niven's 3 mile post on his meridian run south from the 18 mile post on his base line. The east boundary of 7C was run from a point on the north side of Moule Lake calculated 1 mile east from Niven's 11 mile post on his base line.

All lines were well cut out and blazed on the side of the trees facing the line, also on the side facing the direction of the line.

All lines were run with a solar compass.

At every mile a wooden post 6 inches square was firmly planted and cut thereon in Roman numerals the number of miles reckoning from the east or south side of the Township.

At every township corner an iron post made of one and a quarter inch iron pipe, three feet long, pointed and forged at the top was also planted beside the wooden post. The numbers of the Townships were cut on both these posts on the sides facing the respective townships. The wooden posts at these corners were set so that the lines pass through the angles of the post.

At every post where loose stones were convenient, a cairn was built around it and a record of such cairn made in the field notes.

Two bearing trees were marked and noted. The bearings of such are given from the post to the tree.

Wherever the end of a mile came in water, a witness post was planted on the nearest shore with the mileage and chains, plus or minus, marked thereon and duly recorded in the field notes.

TIMBER-Between 5D and 6D.

The timber on line between 5D and 6D is from 6th mile to 3½ miles, spruce, poplar, birch and jack pine to 15 inches diameter, with some good white pine scattered in places. The balance of the line is old brule with small birch, jack pine and spruce and occasional clumps and scattered white pine.

Between 5C and 6C.

From the north-west angle of 5C on line between 5C and 6C to 7 mile Lake, there is considerable white and red pine of good size and quality. From 7-Mile Lake to the 3 mile post it is old brule with small birch, jack pine, poplar and spruce. From the 3 mile post to north-east angle of 5C it was burned last season with very little timber remaining.

Between 5B and 6B.

This recent burn continues 4½ miles east along line between 5B and 6B, the line then enters green jack pine, poplar, balsam, birch and spruce, principally from 6 to 12 inches in diameter and continues in the same timber with addition of black spruce through the balance of this 6 miles and along line between Townships 5A and 6A and Y and Z to Niven's meridian.

Between 5A and 6A and Y and Z.

At the 3rd mile between Y and Z there is a new burn of about three-fourths of a mile.

On meridian between 5A and Y and 6A and Z.

On the meridian between 5A and Y and 6A and Z the timber is the same as just mentioned, green jack pine and black spruce, birch, balsam and poplar from 6 to 12 inches in diameter. In some places the jack pine is found to about 15 inches.

On meridian between 5A and 5B and 6A and 6B.

This same timber continues along meridian between 5A and 5B and 6A and 6B to a little past the 1st mile on latter line. It then changes to old brule with small jack pine and birch, which continues to O.L.S. Niven's post at 3 miles on north side of Rainy Lake.

At the southwest corner of 5A there is about 1 or 2 square miles of new brule which extends west into 5B.

Between 5B and 5C.

On the meridian between 5B and 5C going north the line for the first 3 miles runs through jack pine and white spruce, balsam and cedar to 15 inches diameter. There is some white and red pine in first mile and considerable large white and red pine in the third mile.

Near the third mile the line enters the newly burned country with very little fimber and continues in it to end of 6 miles, and on to near end of fourth mile on line between 6B and 6C.

Between 6B and 6C.

In the 2nd mile on line between 6B and 6C there is about half a mile of green bush. From 4th mile to Moule Lake the timber is green jack pine, spruce, poplar and birch to about 12 inches diameter.

East limit of 7C.

Continuing north this timber is found on east limit of Township 7C. On 2nd and 3rd miles there is some scattered white pine.

On meridian between 5C and 5D.

On the meridian between 5C and 5D the line is in large green cedar birch, spruce and poplar for the first 47 chains going north. It then enters old brule with timber mostly small birch, poplar, spruce, jack pine, with occasional clumps of large timber which has escaped the fire.

These clumps continue for about $1\frac{1}{2}$ miles. The balance of the 6 miles is in old brule with small timber. In many places on this 6 miles and on both sides of 7-Mile Lake, there is considerable white and red pine of good quality and from 10 to 24 inches in daimeter, which has survived the fire.

Meridian between 7C and 7D and north to Lake Wenebegon.

On the meridian between 7C and 7D the first mile is in old brule with small jack pine. It then enters green jack pine, birch, poplar and spruce to about 12 inches diameter. This timber continues to end of 6 miles and on north to about 3½ miles in next line. It then enters the old brule again with small jack pine, birch and spruce, which continues to Wenebegon Lake. Along this 13 miles there is scattered white pine of good size.

To the south and east of Wenebegon Lake there is considerable large white pine of good quality in the old brule.

The black spruce in Townships 5A, 6A, Y and Z will run from 5 to 10 cords per acre of pulpwood in most of the swamps. There appears to be a larger percentage of swamp in these townships than in the others. Probably 10 per cent. of the area is swamp.

I have shown as accurately as possible on the accompanying timber map in colors the area of the different timbers.

The country is mostly rolling with occasional hills from 40 to 100 feet high. The soil is all a rich sandy loam, but so broken with rock and boulders that it is unfitted for anything but timber.

The rock is all red granite. In places small deposits of iron pyrites were observed.

The magnetic variation is principally from 3 degrees to 6 degrees west. The mean of a great number of readings shows 4 degrees, 40 minutes west.

The only considerable water power met with is on the Wenebegon River in Township 7C. There the fall in about one-quarter of a mile is about 20 feet.

There is also about 10 feet of a fall in a quarter of a mile in the rapids just below Wenebegon Lake.

The Abinette or Wabinette River is a fine stream about a chain wide in the lower part and about half a chain in the upper stream and is navigable in low water for loaded canoes to the south-east corner of Township 6A.

The west branch of this stream is usually navigable for loaded canoes but in low water is very tedious. We brought most of our supplies through by Embrass River and the long portage to Moule Lake and from there into the west branch of the Abinette by the canoe route shown on the plan.

The Embrass River above the portage about a mile or two from the mouth is badly obstructed for some distance, but above that is very good for canoes.

The Wenebegon is a clean, open river from the lake down to south line of

6D. It is said to be obstructed a good deal with driftwood below that.

Very great precautions were taken to avoid any risk whatever of fire spreading from our camp fires.

Moose and red deer are very plentiful. Pike seems to be the only fish in

that region. In a number of places beaver are rebuilding old dams.

Accompanying this report are the account in triplicate, plan, field notes and timber plan.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) T. J. PATTEN,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 24.

SURVEY OF TOWNSHIP OUTLINES IN THE TEMAGAMI FOREST RESERVE, DISTRICT OF NIPISSING, 1909.

EGANVILLE, ONT., January 31st, 1910.

SIR,—I have the honour to submit the following report on the survey of certain township outlines in the Temagami Forest Reserve, District of Nipissing, made by me under instructions from your Department, dated the 27th day of May, 1909.

I left Latchford with my party on the eighth day of June last and proceeded by canoes up the Montreal River a distance of about fourteen miles, to where it is joined by the Mattawapika River; thence up the Mattawapika River, through the Lady Evelyn Lake, and up the river of the same name until I reached the Township of Gamble. The river crosses the south-west corner of this township and is joined by a small creek from the south, which creek crosses the south boundary of the above township about ten chains east of the post at its southwest corner, which post I made the starting point of the survey.

I was able with some difficulty to get my canoes up this small creek. The whole journey from Latchford occupied six days. The first half of the route is good canoeing, being largely through lakes; in the latter half, however, rapids are numerous and are difficult to get up with large canoes even in high water. The last day of the journey we were obliged to do considerable wading as the river becomes only a small creek, very shallow in places, and very crooked. I would not consider this route practicable for large and heavily loaded canoes at any time except during the spring floods.

The survey was commenced by taking an observation at the post planted by O.L.S. L. V. Rorke at the south-west corner of the Township of Gamble, and running west astronomically from it in six mile chords of latitude, intersecting the line between the Districts of Nipissing and Sudbury run by O.L.S. A. Niven in 1896, at a point four chains and fifty-five links south of his forty-second mile post. These six mile chords form the south boundaries of the Townships of Corley, Leckie and Dufferin, the boundaries between which were run north astronomically to intersect with the second base line, which was run west astronomically from a post planted by O.L.S. Rorke on the easterly shore of Smooth Water Lake. This post was sixty-eight chains and fifty-four links west of the meridian forming the west boundary of the Township of Gamble, and forty-two chains and fifty links west of the meridian forming the west boundary of the Township of Brewster.

The first and second meridians forming the west boundaries of the Townships of Donovan and Charters, and the Townships of Ray and Leith, respectively, were run north astronomically from the second base line to intersect the line forming the south boundary of the Townships of Nicol and Milner, run by O.L.S. Rorke in 1908 and 1909.

The third base line was run west astronomically to the district boundary from a birch post planted by Mr. Rorke at the south-west corner of the Township of Corkill. An iron bar was planted alongside of this post and both were marked with the names of the townships in accordance with my instructions.

The fourth, fifth and sixth base lines forming the north boundaries of Leonard, Tyrrell and Knight, respectively, were run west astronomically from the southwest corner of Milner and the north-west corner of Van Hise, respectively, which corners were previously established by O.L.S. Rorke's survey.

The meridian between the Townships of Rankin and Raymond was run north astronomically from the north-west corner of Van Hise a distance of six miles, three chains and thirty-seven links, where both a wooden and an iron post were planted, being marked with the above chainage on the south side. The six mile point was found to come in the waters of Duncan Lake.

The details of the survey will be found in the field notes. The lines were well opened out and well blazed. Iron posts one and one-quarter inches in diameter were planted alongside of wooden posts at the township corners and both were marked with the name of the township on the side facing the township. Substantial wooden posts were planted at every mile and marked with the number of miles which they were west or north of the nearest township corner. Bearing trees were taken for all posts and recorded in the field notes.

Observations for Azimuth were frequently taken, but cloudy weather prevented their being taken as often as desired. The magnetic variation of the needle, while somewhat erratic in places, was mostly found to be from six to eight degrees west.

GENERAL DESCRIPTION.

The tract of country included in the survey is mostly rough and broken; the Townships of Corley and Donovan and the easterly parts of Leckie and Ray being particularly so; in these the hills often rise to elevations of from three to four hundred feet above the level of Smooth Water Lake. Rock outcrops are very numerous over the entire area. There are some swamps in the valleys but they are mostly of small extent. There is one of considerable size in the Townships of Leckie and Ray on either side of the Sturgeon River. From one-third to one-half of the area of these two townships is of a swampy nature, the timber

being chiefly spruce from four to eight inches in diameter. These swamp areas when cleared and properly drained could possibly be profitably cultivated but outside of them the country offers nothing from an agricultural standpoint.

WATER.

The country in this region is well watered; small lakes and creeks are numerous. The more important streams are the east and west branches of the Montreal River, the Sturgeon River and the Wapoose Creek. These streams have no great volume of flow as the watersheds of each are not very extensive. They, in combination with the numerous lakes, furnish excellent facilities for travelling by canoe.

There are no water powers of much importance in the country surveyed. The only falls that occur are the Bridal Veil Falls on the east branch of the Wapoose Creek in the Township of Leith. They are from thirty to thirty-five feet in height, but the volume of water is so small that it is questionable if much power could be developed from them at all times of the year. As their name might suggest they are quite interesting from a scenic point of view. Splendid springs of pure cold water are often found.

TIMBER.

There is considerable timber of commercial value in this district. White and red pine are not often found in any quantity but are scattered more or less over the entire area. It is particularly noticeable along the shores of Smooth Water Lake and for two or three miles below on the banks of the Montreal River. It ranges in size from twelve to twenty-four inches in diameter. It is rough in quality but fairly sound. Banksian pine are abundant and vary from eight to twenty-four inches in diameter. Spruce, balsam, birch and cedar, also tamarac and poplar, are distributed pretty generally and are found up to twenty or twentyfour inches in diameter. There are considerable areas in the Townships of Raymond, Knight and Tyrrell which seem to have been burned over some years ago. They are now covered with a small thick growth of chiefly birch, poplar, spruce and balsam. Fire only a few weeks previous to this survey burned over a considerable portion of the parts of the Townships of Knight and Tyrrell south-west of Pigeon Lake and the Montreal River, destroying nearly all the timber and leaving This fire originated north-west of Pigeon Lake, and was still smouldering along the west branch of the Montreal River in the latter part of August.

MINERALS.

The entire territory included in this survey has been prospected for silver within the last two years and prospectors' camps were numerous. Outcrops of diabase were found in every township and were almost invariably staked. A good many prospectors seemed to be occupying themselves more in looking for areas not yet claimed than in actually searching for minerals.

Geological surveys have been made of the whole country by experts from the Bureau of Mines, so it would be superfluous for me to discuss the rock formation. etc.. in this report.

An effort was made to "tie on" all surveyed mining claims, and they are shown on the plan and in the field notes. I found it impracticable to keep record of claims staked but not surveyed.

GAME.

The country abounds with moose, deer are not so plentiful. Evidences of the presence of bears were occasionally seen. Beaver are abundant and the smaller fur bearing animals are found. Fish were fairly plentiful in the lakes and streams, pike and pickerel being the most common, grey trout were caught in Smooth Water Lake from three to five pounds in weight and we were told by prospectors that they have been taken up to fifteen pounds.

Accompanying this report are a general plan, a timber plan, field notes and

account in triplicate.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) HERBERT J. BEATTY.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 25.

SURVEY OF TOWNSHIP OUTLINES IN THE TEMAGAMI FOREST RESERVE,
DISTRICTS OF NIPISSING AND SUDBURY, 1909.

Guelph, Ont., December 31st, 1909.

SIR,—I have the honour to submit the following report on the survey of township outlines in the Districts of Nipissing and Sudbury in the Temagami Forest Reserve in accordance with instructions from your Department dated May 31st, 1909. Leaving Sudbury on the morning of the 7th of June, I proceeded by wagons to Lake Wahnapitae, then crossing the lake by canoes I ascended the Wahnapitae River to the north boundary of Parkin Township. After taking an observation on Polaris for meridian I commenced my survey at the north-east angle of that township and ran north six miles along the east boundary of Fraleck to the north-east angle of that township. I then turned west and ran the north boundary of Fraleck and from the post at the north-east corner of Creelman Township I ran north on the boundary between Grigg and Beresford six miles to my second base line. From that point I ran east six miles and then west six miles to O.L.S. Niven's district line of 1896.

By moving my supplies up the river as the work progressed and running the base lines as they were reached I produced the two meridian lines northward until they intersected the base line surveyed by O.L.S. Beatty earlier in the season and which formed the north boundary of the Townships of McLeod and Stull.

After producing my fourth base line westward to the north-west angle of the Township of Leask I proceeded by way of Welcome Lake and the Wahnapitae River to the forty-two mile post on O.L.S. Niven's district line, from which my fifth base line was started. This line I ran west six miles to the north-west angle of the Township of Unwin and then turned south and ran the meridian form-

ing the west boundaries of Unwin, Leask, McNamara and Beaument to its intersection with the base line run by O.L.S. Proudfoot in 1888, and at the same time completing the north boundaries of the two last named townships as they were passed.

The base lines were run as six mile chords of a parallel of latitude and frequent observations were taken throughout the survey to verify the accuracy of the work. The lines were well cut out and well blazed and a substantial wooden post was planted at the end of each mile and marked in Roman numerals, on the east or the south side, with the number of the mile counted west or north from the township corner. Where loose stones were convenient a mound was built around the post, bearing trees were also blazed and marked at each post. At each township corner an iron post 1½ inches in diameter was planted beside the wooden post and both were marked with the names of the adjacent townships.

The country included within the limits of this survey is for the most part rocky, much of it is extremely hilly and very little of it is suitable for agricultural purposes. The greater part of it is drained by the Wahnapitae River, which is, throughout the most of its length, a swift flowing stream broken by numerous rapids. During low water the volume of the flow is small and therefore it will not have much value for the development of power. Through the kindness of Mr. W. R. Rogers of the Bureau of Mines I am able to show a correct map of this river and of Burwash and Welcome Lakes.

The Sturgeon River drains the Township of McLeod and the eastern part of Haentschel Above the junction of the Stull branch it is a small stream and little used as a canoe route

The Vermilion River crosses the south-west corner of Beaumont and drains most of that township and the western part of McNamara. This stream is also small during low water.

The main line of the Canadian Northern Railway here follows closely the west bank of the Vermilion. At the time of survey the work of grading was well advanced and the rails have since been laid.

The country is fairly well timbered. White pine of medium quality was found scattered over a considerable portion of the area. Jack pine of good size and quality is found in large quantities in some townships, there is also a large amount of spruce suitable for pulpwood and some poplar, balsam and white birch.

There was considerable activity among prospectors in the northern part of the country this year, a great many claims have been staked and some promising indications of silver are said to have been found.

Very few fish were found in the lakes and streams and small game was scarce. Red deer were scarce but moose were plentiful and a few bears and beaver were seen.

Accompanying this report are the field notes of the survey and a map of the townships outlined and a timber plan

I have the honour to be,

Sir,

Your obedient servant,

(Signed) James Hutcheon.

The Honourable, The Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 26.

Survey of Township Outlines, Temagami Forest Reserve,
District of Nipissing.

NEW LISKEARD, ONT., December, 1909.

SIR,—I beg to submit the following report on the survey of Township Outlines in the district between Lake Temagami, Lady Evelyn Lake, Mattanapika River and the Anima Nipissing Lake in the District of Nipissing, performed under instructions dated July 22nd and September 15th, 1909.

I commenced my survey at the south-east angle of the Township of Rorke and ran the south boundaries of Leo, Dane and Kittson, due east astronomically (six mile chords) to intersection with the westerly boundary of the Township of Coleman. The northerly three miles of the boundary between the Townships of Leo and Dane, previously run by O.L.S. L. V. Rorke, was produced to intersection with this line, and then produced southerly to intersection with the line produced due west astronomically, from the north-west corner of the Township of Chambers, from a point on this line, six miles south of the Township of Dane, the south boundary of the Townships of Cole and Brigstocke was run east astronomically (six mile chords), a distance of twelve miles; from six mile posts on this line meridians were run north and south to intersection of east and west lines already described.

The above lines were well opened up and the adjacent trees blazed as in the usual manner, while wooded posts of the most durable material available, properly and distinctly marked, were placed where possible at the even miles from the southerly or easterly extremities of the above lines. Where these points came in the water or on the face of a rock or otherwise, the posts were planted at the nearest suitable point with the chainage in miles, chains and decimals marked on the proper faces of the post. Posts were in all cases firmly planted, generally a mound of stones being built around the post to render it more permanent, and suitable bearing trees were marked and recorded in the field notes.

Iron bars marked with the chainage and name of adjacent townships were

placed alongside of wooden posts at the following points, viz.:

On the south boundary of the Township of Leo, at the easterly shore of Willow Island Lake, at the south-east corner of the Township of Leo, at the south-east corner of the Township of Dane, at the north-east corner of the Township of Dane, at the north-east corner of the Township of Brigstocke, at the south-east corner of the Township of Brigstocke, at the south-east corner of the Township of Brigstocke, at the south-east corner of the Township of Cole, at the south-west corner of the Township of Cole. No iron bars were planted on the south boundary of the two unnamed townships to the south of the other townships, whose outlines I surveyed.

At frequent intervals throughout the survey observations on Polaris were taken for the purpose of obtaining Azimuth and the magnetic variation which ranges between eight and nine degrees west of north was noted, the results being entered in the field notes.

Throughout the survey the chain bearers were duly impressed with the importance of their duties, particularly with regard to care and accuracy in their operations and the necessity of keeping the field notes so that the natural features would be plainly shown.

Soil.

This territory, if deprived of its timber and vegetation, would present a very barren and inhospitable appearance, the surface being generally rock or boulders and loose stones with very little soil except in the swamps. Any soil present consists of sand or a very light sandy loam of a questionable agricultural value. The only settler in the country is located at the outlet of the creek from Red Squirrel Lake into Sandy Inlet on Lake Temagami.

ROCK FORMATION.

The whole country is composed of sharp rocky ridges, generally lying in a northerly and southerly direction with frequent cliffs and abrupt descents. The rock is principally diabase of the Past Huronian period, and quartzite slate and conglomerate of the Lower Huronian. Considerable prospecting has been done throughout the more accessible part of the country Several properties are being developed this winter and it is expected that by spring a more definite knowledge of the country will be obtained.

TIMBER.

The most of the timber of this country has been burned away and now it consists principally of second growth poplar, birch, spruce, balsam and small pine. Some small groves of red and white pine have escaped the fire, the principal one being noticed from the line between the Townships of Dane and Kittson. It appears to extend both east and west from this line for a considerable distance. Also along the fifth mile of the southerly production of the east boundary of the Township of Brigstocke a small grove was noticed just to the east of the line. Banksian pine is pretty well distributed throughout this region, but it is of a small size and generally pretty scattering. Very few swamps were met with, but in these spruce and a few cedar of fair size and quality were noticed, while the tamarac, as is common throughout this northern part of Ontario, is dead.

There are no water powers of any value in this country, which is somewhat curious from the large number of streams and lakes that are constantly met with. It is from this fact and also from the beauty and picturesqueness of the landscape when viewed from a canoe that has caused this region every fall to become a Mecca of tourists. Nothing need be said about the beauties of this country or its fame as a fishing or hunting preserve. It has been effectively and repeatedly described by the various pamphlets issued by our railway companies, by the many articles in our sporting magazines and by the press in general.

Accompanying this report is a general plan on a scale of one mile to an inch, a timber plan of the same scale, field notes, oaths of chainmen and all the other necessary documents.

All of which is respectfully submitted.

I have the honour to be,

Your obedient servant,
(Signed) C. H. Fullerton,
Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 27.

Survey of Township Outlines in the Temagami Forest Reserve, District of Nipissing, 1908.

TORONTO, ONT., November 30th, 1908.

SIR,—I have the honour to submit the following report upon the survey of certain Township Outlines to the east of the East Branch of the Montreal River in the Temagami Forest Reserve, made by me under instructions from your Department, dated the twenty-seventh day of May nineteen hundred and eight.

Leaving Latchford on the tenth day of June with my party and outfit I proceeded via the Montreal River to the field and commenced operations in due course. The first meridian line was run due south from a point six miles due west of the north-west angle of the Township of Farr and forms the eastern boundary of the Townships of Morel, Haultain, Nicol, Charters and Donovan. The second meridian line was run north from a point six miles due west from the south-west angle of the Township of Rorke and forms the eastern boundary of the Townships of Gamble, Brewster, Corkill, Lawson, Chown and Shillington.

Base lines were run six miles east and six miles west from the north-west angles of the Townships of McGiffin and Tretheway, in other cases were produced west from points established last year.

Three of these were produced westerly to the East Branch of the Montreal River, as follows:

The north boundary of the Township of Morel intersecting at Sisseney Lake, the north boundary of the Township of Nicol at Burk Lake and the south boundary of the Township of Donovan at Smooth Water Lake.

From the last mentioned intersection I connected by triangulation across Smooth Water Lake with P.L.S. Sinclair's 1 mile point on his survey of the East Branch of Montreal River made in 1867, where I found an eight inch red pine tree blazed on four sides and a few feet away on another red pine, the name "D. SINCLAIR, P.L.S." (date), cut in and although somewhat charred by fire since being placed there, was still quite distinct, the date alone being indistinct.

Good substantial squared wooden posts were planted at every mile throughout the survey, excepting where such point came within a lake or river, in such case a witness post was planted at the shore with the proper chainage inscribed thereon. The mile posts were all properly marked with the mileage, numbered from the east and south from 1 M. to 6 M. for each township boundary.

Iron posts one and one quarter inches in diameter were planted in addition to the wooden posts at township corners and also at the intersections before mentioned at Smooth Water and Burk Lakes on the East Branch of the Montreal River.

PHYSICAL FEATURES.

In general the surface of the country traversed is very broken and rough, high hills, with rock surface succeed each other with marked regularity as the country is travelled from east to west. The watershed towards the East Branch does not extend more than two miles to the east.

The headwaters of the South-west Branch of Bear Creek, Stony Creek and North Branch of Lady Evelyn River are situate within the Township of Corkill where a number of small spring lakes and ponds are found.

The largest valley noticed was that through which the East Branch flows in a very winding course in the Townships of Charters and Nicol, being from 1 to 2 miles wide. The banks of the stream are of good clay loam. The soil in general throughout the country is sandy with loose rounded boulders, but the country rock is not very deep below the surface, even in the swampy tracts.

TIMBER.

The different kinds of forest trees which are found growing in any quantities are jack pine or Banksian pine, birch, spruce, poplar, balsam, cedar and red and white pine. The fires which swept over that country years ago seem to have burnt in small areas and at different times; especially is this noticeable in the southern part, where small second growth jack pine, birch and poplar will be found on one ridge while the next will be covered with the same kind of trees averaging from 6 to 16 inches in diameter. In general terms I would describe the forest which has survived the fires within the past semi-centenary as consisting of Banksian pine, spruce, poplar, balsam, birch and cedar, averaging from eight to sixteen inches in diameter. Also small bunches of red and white pine in the Townships of Charters, Donovan, Gamble, Brewster, Tretheway and McGiffin from 10 to 30 inches in diameter. That of more recent growth consists of Banksian pine, spruce, balsam, birch and poplar varying in size up to 8 inches and thickly studding the surface.

During the past season a large tract of country was burnt over adjoining Stony Lake, Bloom Lake, Miller Lake, Lost Lake, GowGanda Lake, Obuskong Lake and along the water routes joining these lakes, and while no great quantity of valuable timber was destroyed one of the finest and most attractive canoe routes in Northern Ontario has been disfigured. No fires occurred to my knowledge during the season south of this one throughout my work.

WATER AND WATER POWERS.

Very few rainfalls during the past summer caused the creeks to become very shallow and canoeing on the upper waters of the streams met with was difficult. Old portages were cleaned up where occasion required their use and several new ones were cut out. Big Bear or Macobe Lake is the largest body of water within this season's work, being over eight miles long and three wide.

There are no falls or rapids within the territory attractive for water power development.

ROCK FORMATION.

The northern part of this territory has been investigated closely by the Department of Mines, in the southern portion quartzite extends throughout with here and there small dykes of diabase.

GAME.

A large number of moose were seen during the work in the Lady Evelyn River country. Also signs of bear and several instances of fresh beaver work. Wolves were also heard on several occasions within short range of camp.

7 L.M.

Not many fish were caught in the lakes or streams, pickerel, pike, bass and trout being the varieties seen.

Accompanying this report I submit plan, field notes, affidavits and accounts.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) L. V. RORKE,

Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 28.

TOWNSHIP OUTLINES, DISTRICT OF SUDBURY.

PETERBOROUGH, December 27th, 1909.

SIR,—I have the honour to submit the following report on the survey of Township outlines in the Temagami Forest Reserve, District of Sudbury, performed by me under instructions from your Department, dated July 26th, 1909.

I commenced the survey at the sixty-sixth mile post on the boundary line between the Districts of Nipissing and Sudbury. From this point I ran the north boundary of the Township of McMurchy due west astronomically six miles. From the end of the sixth mile I ran the west boundaries of the Townships of McMurchy, Fawcett, Ogilvie and Browning due south astronomically, a distance altogether of twenty-four miles and nineteen links, where I intersected the north boundary of the Township of Unwin run by O.L.S. Hutcheon during the past season. I produced the north boundary of the Township of Unwin due west astronomically six miles from the north-west angle thereof.

From the ends of the sixth, twelfth and eighteenth miles coming south, I ran the north boundaries of the Townships of Fawcett, Ogilvie and Browning due east, astronomically, to the District boundary line, which I intersected, sixty-five links north, fifty-one links south and nineteen links north of the sixtieth, fiftyfourth and forty-eighth mile posts respectively. Going west from the District line along the north boundary of the Township of McMurchy the first mile and a quarter, which is of a swampy character, was burnt over during May of the present year. From this point to the end of the sixth mile the country is rough, rocky and hilly, timbered with Banksian pine, spruce, white birch, balsam and some cedar, with alder and willow underbrush and heavy windfalls. The average size of the timber along this line is about ten inches. The Montreal River, a small, swift stream at this point, is crossed on the second mile. Going south along the west boundaries of the Townships of McMurchy and Fawcett, no material change in the character of the country is noticeable, with the exception that some scattered red and white pine of fair quality and up to thirty inches in diameter are met with.

Going west from the District line along the north boundary of the Township of Fawcett to the Montreal River, a distance of four and one-half miles, the

country which is of the same rocky, broken character, was burnt over about fortyfive years ago and is now grown up with small Banksian pine, spruce, white birch, poplar, alder and willow. The Montreal River at this point is about two chains wide, with a rather sluggish current. From the river to the north-west angle of the township the character of the country is very similar to that of the west boundary.

Going west from the District line along the north boundary of the Township of Ogilvie, the country is of a rolling character, but with the exception of a little more spruce, the timber remains the same.

Going south along the west boundary of Ogilvie and approaching the height of land between the waters of Lake Huron and the Montreal River, the country is generally swampy, with spruce of fair size and in some places open spruce swamps. The height of land is crossed about half a mile north of the south-west angle of the township. The north and west boundaries of the Township of Browning are more or less swampy with knolls of Banksian pine, white birch and poplar.

Going west from the north-west angle of the Township of Unwin to a point twelve miles west of the District line, the country is rough, rocky and broken, and with the exception of a few scattered white pine and some large hard maple, the timber remains the same.

There is a considerable quantity of white and red pine of fair quality and up to thirty inches in diameter, extending across the Township of Fawcett and especially along the Montreal River.

As in the case in the Clay Belt, nearly one hundred miles to the north, all the tamarac in this locality is dead.

Numerous lakes and streams were met with, all containing the best of water. The largest body of water seen is Sandy Lake, in the Township of Ogilvie, from which this branch of the Montreal River takes its rise. It is a beautiful sheet of water nearly two miles in length by one mile in width, with a wide sandy beach. Less than a quarter of a mile south of Sandy Lake and on the other side of the height of land, Rosie Creek (a feeder of the Wahnapitae River) takes its rise; from this point to the south boundary of the Township of Browning is a chain of small lakes, which constitute the canoe route from the Wahnapitae River into this locality.

The canoe route, as a whole, through these four townships is very difficult and slow, especially on the Montreal River through the Township of McMurchy, where a succession of rapids have to be overcome. The geological formation of this locality is the Huronian; numerous small veins of calcite (yellowish white) are met with, and I understand native silver has been discovered on Rosie Creek in the Township of Browning. Numerous parties of prospectors were seen, all apparently heading for Shining Tree Lake.

Throughout the whole survey, and particularly when in the vicinity of Shining Tree Lake, I kept a sharp lookout for the lines of any mining claims that we might cross. I have to report, however, that none were seen.

There is no agricultural land in this locality.

The magnetic variation of the needle is about 7 degrees 30 minutes west.

I found the moose, partridge, beaver and otter very plentiful in this section of the Reserve.

In conclusion I beg to state that a great amount of labor and hardship was experienced by myself and party in connection with this survey, with over one 7a L.M.

hundred miles of canoe journey and numerous portages, some of which are over two miles and one-half in length, to reach my starting point rough, broken, brushy country to cut through, and with almost continuous rain during the months of August and September.

Accompanying this report are plans, field notes and accounts, all of which

I trust will be found complete and satisfactory.

I have the honor to be,

Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 29.

SURVEY OF THE TOWNSHIP OUTLINES, DISTRICT OF SUDBURY.

ORILLIA, October 8th, 1910.

SIR,—By instructions issued from the Department of Lands, Forests and Mines under date of the 28th day of April, 1910, we were directed to make surveys of certain township outlines in the District of Sudbury. Having made such preliminary arrangements as are necessary to carry out work of that character, we left Biscotasing with our party on May 24th following, for the site of the future survey operations. The supplies and heavy part of the outfit were conveyed over the land portages by the teams of the Bisco and Gowganda Transportation Company, and on the water stretches from the height of land in canoes. Our party followed the old canoe route up Bisco Lake, down Bisco Creek, and thence over the height of land to the Mattagami waters, and down the Mattagami River to Lake Kenogamissee. At the latter point, hearing of a portage route leading to the east across the Kapiskong River and into Lake Papakomeka, thus presumably crossing our westerly meridian at about half way in its length, the main bulk of the supplies were sent across that way, while the remainder of the party proceeded down the river to the Porcupine Portage, and thence crossing this portage to the westerly boundary of the Township of Tisdale and south on that line to Niven's base line at the south-west angle of Tisdale, were in a position to commence actual survey work on the second day of June.

As it was impossible, owing to cloudy weather conditions, to obtain an astronomical observation to commence the work, our westerly meridian beginning at the aforesaid point was turned south from Niven's base line and corrected by observation as soon as this could be obtained. Thereafter observations were taken whenever possible, but the cloudy and wet weather prevailing during our trip in, and for some days after commencing work on the line, gave place to hot, dry weather and forest fires, and the smoke from the latter proved quite as effectual a blanket in hiding the heavenly bodies as the clouds had previously been.

Wooden posts were planted at the end of each mile on the base and meridian lines, and were marked with the mileage dating on meridian lines from the next base line to the south and on the base lines from the next meridian to the east. In addition to these wooden posts, at each township corner, with the exception of the north-west corner of Deloro, where the iron post marking XII. M., on O.L.S. Niven's base line was used, an iron post was planted and marked with the names of the respective townships for which it stood, on sides facing diagonally into these townships. An iron post was also planted on the west boundary of the Township of Bartlett and marked V. M.

MAGNETIC VARIATION.

Throughout the area covered by the survey the magnetic meridian, excepting at a few points where strong local attraction was apparent, showed but little fluctuation, the mean declination of the needle being about 7½ degrees west of astronomic north.

Soil.

The northerly part of the territory covered by the survey along the west boundary of Deloro and Adams and also the country traversed by the line between those townships is of comparatively level or slightly rolling character. It contains some level tracts of clay capable of agricultural development, while the higher levels are occupied by sandy soil with occasional outcrops of rock. Proceeding south from the section above referred to, a more rugged character prevails, the soil being sandy and stony, quite unfit for profitable agriculture, and presenting a generally hilly surface. In travelling south on our westerly meridian this change from a level or slightly rolling character to that of a rugged and hilly aspect, is abruptly marked at a point just south of the portage into Lake Papakomeka, crossing this line a little more than a quarter of a mile south from the boundary between Adams and McArthur. The country cannot be called rough in comparison to what prevails further to the south in some sections of the rock country, but is broken by low hills and ridges of from twenty-five to one hundred feet in height, the latter elevation, however, being rare.

TIMBER.

In a description of the timber values within the area of the survey, it would suggest comparison with certain patent medicine advertisements showing the "before" and "after" effects upon the patient, only that in the present case the pictures would be reversed. Much of the timber standing on the north-western part of the area in the Townships of Deloro and Adams when the lines were run was subsequently rendered worthless by the widespread forest fires.

The forest growth comprises the usual soft wood varieties of the district, and the chief values would lie in spruce and balsam pulpwood and in jack pine tie timber. A fine tract of jack pine running from six to fifteen inches in diameter and occupying a sandy plain, is crossed by our westerly meridian between V. M. and III. ½ M. on the west boundary of Deloro. Along the west boundary of Bartlett there is also a good deal of jack pine suitable for railway ties, growing generally with thick balsam and spruce. Large jack pine, with spruce, balsam, poplar and

birch, also occurs east of the lakes on the south boundary of Geikie. There are numerous cedar swamps within the area, but the trees are usually short and limby, often hollow, and seldom in sufficient quantity in any one locality. The tamarac, while a common tree over the whole area, is all dead and much of it too far advanced in decay to be commercially valuable. White pine is scarcely a factor in the forest growth of this section, being mostly confined to scattered trees of little commercial importance. The largest area of white pine observed was between the west boundary of McArthur and the stream flowing north into Lake Papakomeka. There is one belt here extending about a mile north and south from opposite about $2\frac{1}{2}$ M. to $3\frac{1}{2}$ M., of trees from 14 to 24 inches in diameter, and many scattered trees. Much of this area, however, was burned clean during June of the current year and the timber, including this pine, fire killed.

How much damage the fire has caused during the present season throughout the area covered by the survey, it would be difficult to estimate, but it has swept a large area, and where it struck the old windfallen brulés it left little but bare sand. About the middle of June, bush fires began to be in evidence, and clouds of smoke could be seen now in one direction and now in another, and on the 24th of that month, on resuming our westerly meridian, we entered the fire area, at V. M. on the west boundary of McArthur. This fire swept across the above township from the east, travelling from east of Lake Papakomeka across the part traversed by the meridian in a single night and spreading west and south. A great part of this township was swept by this fire. In running the meridian south across McArthur and the northerly part of Bartlett we were compelled to keep our camp on the canoe route leading south from Lake Papakomeka, owing to the near proximity of the fire. and even along this water route the bush was burning, and it required the utmost vigilance to preserve the outfit from destruction. On two nights on the water route our camp was surrounded by fire and trees were crashing down within a few chains. Caches of supplies had to be made carefully, in one case in a canoe anchored out in the lake, canoes had to be guarded, and at all times fire was a main factor in all our movements. The smoke obscured the sun during the day and the sickening crash of falling trees was an ever-present sound. This condition of things ended in one grand rush of the fire to overtake us when running our south base line west across the large lake, presumably Akikenda, between IV. M. and V. M. on the south boundary of Bartlett. In this we barely escaped across the lake with our supplies before the flames reached the west shore. This fire travelled on a west wind through an old windfallen brulé with frightful rapidity, and was still burning in the green timber along the lake when we moved east on our line the following day. From here east, however, we saw no more fire. On sending men back along our westerly meridian to bring up canoes left at Porcupine Portage on the Mattagami River, they reported burnt country from about III. M. on the west boundary of Adams to Niven's base line. This was all green when the line was run early in June.

We had abundant opportunity for observation and reflection on the subject of forest fires, and it appears strongly to us that mineral development and timber conservation in the same area are policies incompatible, and that a very few seasons of the tinder box variety, such as the present, will be sufficient to wipe out timber values in this Reserve, unless much more drastic measures are adopted for its protection.

GEOLOGY.

No attempt will be made to describe the geology of the region, which is well supplied with experts in that field. In the northerly portion, however, such rock outcrops as were met with were mostly of a greenish fine-grained variety, varying from a schistose to almost massive structure often in an interval of a few yards, and apparently belong to the Keewatin series. Porphyritic granites, traps, diabase and gneiss were also met with in various locations and are shown in field notes. No veins or mineral deposits of any apparent economic value were met with. The southerly portion traversed by the lines bounding the Townships of Bartlett and Geikie appears to be a much disturbed area and looks like good prospecting ground.

WATERWAYS.

The only canoe route traversing this area with which we are acquainted is a continuation of that over which we took our supplies from Lake Kenogamissee. This route leaves the above lake at a creek entering from the East at about threequarters of a mile above Wawaitan Portage and proceeds by a two-mile portage to Grassy or Kapiskong River, up the latter river about two miles, passing in the interval a portage round a falls on the river, and leaving the river about half a mile above the head of said falls, thence over a portage of about fifty chains easterly to a lake, and from the easterly end of the latter lake down a short but steep portage into a creek flowing north and passing about 25 chains west of our westerly meridian, with which it is connected by a good level portage leading to Lake Papakomeka. This latter creek is a branch of Mountjoy Creek. South from Lake Papakomeka the creek is navigable for canoes as far as the first lake south of the line between McArthur and Bartlett, but has numerous rapids and we found it necessary to do a large amount of cutting to get up. The creek flowing north out of Lake Papakomeka is also a branch of what has been called on previous plans Mountjoy Creek, and enters the Mattagami River near Porcupine Portage. This latter creek has not been cut out for canoe travel and would require a large amount of work to make it navigable, but has plenty of water. The largest lakes met with were those crossed by our easterly meridian at I. M., between McArthur and Douglas, and the lake crossed by our base line between IV. M. and V. M. on the south boundary of Bartlett and which we understand to be Lake Akikenda. The limits of neither of these lakes could be ascertained. As usual in this part of the country the district is well watered. The drainage of the part between our eastern meridian and the District line appears to be through the branches of the Red Stone and Nighthawk Rivers into Nighthawk Lake.

Moose were fairly abundant, but not so much in evidence as in some localities further south. In fur-bearing animals the beaver was especially noticeable, being more plentiful than in any section we have visited for some years. We ran across new dams and fresh cutting quite frequently and the district does not appear to have been recently trapped over.

We have the honour to be,
Sir,
Your obedient servants,
(Signed) CAVANA AND WATSON.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 30.

SURVEY OF OUTLINES OF TOWNSHIPS, DISTRICT OF SUDBURY.

Sudbury, August 30th, 1910.

SIR,—We have the honour to submit the following report on the survey of the outlines of the following townships, viz., Sweeny, Frechette, Lampman, Hodgetts, Amyot, Sheard, Asquith and Churchill, performed under instructions dated May 4th, 1910.

This survey was commenced on May 26th, the party leaving Sudbury on the Canadian Northern Ontario Railway and going as far as Post Lake.

The work was commenced at the south-west angle of McNamara, the first base line being run west, astronomically, six miles, from this point a meridian line was run as far south as O.L.S. Proudfoot's base line, from the north-west angle of Sweeny the work was carried on northerly and the base lines run east, astronomically every six miles.

The north boundary of Hodgetts, which was run last season by O.L.S. Fitzgerald was connected up to the meridian line, the latter being seventy links west

of the sixth mile post.

The north boundary of Churchill, which had already been run by O.L.S. Fitzgerald, was tied on to and his posts moved to the intersection of the meridian line, and his base line.

The south boundary of Lampman was rechained a second time owing to the

surplus noticed, only a small difference from the first chainage was found.

Iron posts 1¹/₄ inches in diameter and 6 inch wooden posts were planted at all Township corners and marked as instructed, 6-inch wooden posts properly marked were planted at every mile, both on the meridian line and the baselines.

The timber consists mostly of birch, poplar, spruce and balsam, a small patch of white pine was encountered along the north boundary of Sweeny. There are a few spruce swamps, but the timber is small. The west boundary of Hodgetts consists mostly of Banksian pine about 8 inches to 10 inches on the average.

No recently burnt country was encountered, except near the Right of Way of the Canadian Northern Ontario Railway at Gowganda Junction and immediately west of West Shining Tree Lake, an area of little over a square mile having been burnt last season.

Along the west boundary of Asquith and Churchill there is a fair amount of hardwood bush interspersed with cedar swamps, the cedar being of large diameter but stunted in height and, as a rule, hollow.

The easterly boundary of Sweeny is mostly small, dry tamarac and second growth birch and poplar.

The most northerly townships are very rough and hilly, and the southerly townships consist more of rolling country. In the vicinity of Esker Lake and the Opickinimaka River the country is swampy.

The country as a whole is well watered and canoe routes are numerous.

The rock is mostly granite and diorite, some diabase being encountered at Esker Lake. An iron formation crosses through the northerly part of the Township of Asquith, also a variation of 10 degrees to 15 degrees was noticed with the needle in this vicinity.

Observations were taken as frequently as possible, though most of the time the weather was extremely cloudy.

The land is not suitable to agriculture, being either too rough or sand plains. No water powers of any commercial value were met with though small falls and shallow or flat rapids on the rivers and streams are numerous especially on the Opickinimika River.

Game is very plentiful and consists principally of moose and deer. Signs of

bear were plentiful, though few were seen.

The partridge appear to be increasing very rapidly and were quite numerous. Ducks are plentiful.

The lakes are all well stocked with fish, the beaver are also very numerous on

the small lakes and rivers.

Accompanying this report is a mounted plan, a timber plan on tracing linen, a blue print showing canoe routes sketched in, field notes and chain bearers affidavits and an account duly sworn to.

We have the honour to be,
Sir,
Your obedient servants,
(Signed) DEMOREST, STULL AND LOW,
Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 31.

TOWNSHIP OUTLINES, DISTRICT OF SUDBURY.

EGANVILLE, October 1st, 1910.

SIR,—I have the honour to submit the following report upon the survey of certain township outlines in the District of Sudbury, made by me, under instructions from your Department, dated May 2nd, 1910.

I proceeded from Bisco Station, C. P. Railway, via Bisco and Gowganda Transportation Company route, as far as Sucker Lake, where I left the Old Mattagami Route and proceeded in a course almost due north via Mesomekinda, or as it is better known locally, Beaver Lake, and Kenogaming Lake to the portage, from the north end of Opeshingquaquaga Lake, leading into Trout Lake, in the Township of Whitesides.

This, on the whole, is a fairly good canoe route, and while there are between twenty and twenty-five portages, none of them north of Sucker Lake are over one-half mile long. There is one stretch of shallow creek, about six miles long to ascend, commencing four or five miles north of Beaver Lake. The map furnished me shows a portage from Lake Kenogaming into Lake Aquesqua, and omits to show Kenogaming River flowing north out of former lake, there being two short portages between Kenogaming and Aquesqua. An accurate map of the greater part of this route could be compiled from records of survey made by James Bay Railway Company.

From Trout Lake, I proceeded to Niven's 30-mile post, and in accordance with your instructions from this post I ran my first meridian due south, astronomically, six miles. I then ran the south boundary of the Township of Carscallen east to intersection with meridian run by Lang and Ross this summer, and I ran the south boundary of Whitesides west, a distance of six miles, from which point I projected my second meridian north, astronomically, to intersection with Niven's base line and south to the intersection with south boundary of Pharand Township.

The south boundaries of Keefer and Hillary townships were started east from posts established on my second meridian, the running of the former having to be postponed until after the latter, on account of the danger from fire that was run-

ning through that section.

After having run these south boundaries, I returned to my first meridian and ran it due south, astronomically, running the south boundaries of Denton and Reynolds east, astronomically, from the intersection of said meridian with south-boundaries of Keefer and Hillary townships respectively.

The south boundaries of Childerhouse and Pharand townships were run east and west respectively from a point on my first meridian distant twenty-four miles

south from Niven's base line.

Substantial wooden posts were planted at the end of every mile, excepting where these points were located in water, and in such cases witness posts were planted on the shore and marked as shown in field notes. Wooden posts and iron bars were planted at all township corners, excepting at the corner of Whitesides, Carscallen, Denton and Keefer, and on account of this corner being in a lake, witness posts were planted on the line between Keefer and Denton at a point distant three chains south of the corner.

All posts are marked as set forth in the field notes, two bearing trees being marked, distances and bearings to which were taken and recorded for each post wherever they could be obtained, the posts being firmly driven in ground wherever

possible and stones planted around them while available.

The country as a whole is fairly level, very few hills of any height being seen, the surface is either level or gently rolling with occasional outcrops of rock, but owing to surface being thickly wooded and usually covered with moss we had not an opportunity of seeing any indications of minerals, though I have heard that since I ran the west boundary of Denton Township a considerable portion of it has been staked.

The soil is utterly unfit for agricultural purposes, being either sandy or very stony. The swamps, which form a considerable percentage of the total area, appear to be nothing but a bed of boulders, once you get through the moss and muck on the surface.

As the area embraced in this survey is adjacent to the Porcupine Gold Fields, there is no doubt that it will be thoroughly prospected, but we saw no exposures of rock that would lead us to expect that it will turn out a mining country.

The timber that is of any value is principally spruce and Banksian pine, a considerable quantity of the latter of good quality being found through Childerhouse, Reynolds and Denton townships. Red and white pine from 12 to 30 inches in diameter is found round Trout Lake and on the islands therein; also on the line between the townships of Keefer and Hillary, extending about three-quarters of a mile west of Otter Lake, but owing to our outlines being six miles apart it is impossible to give a report on the timber that is of any practical value. The pine on the west side of Otter Lake appeared to be the most valuable, but the area on which it is growing may be of comparatively limited extent.

Moose are very plentiful and the fishing is fairly good. Trout Lake is a beautiful sheet of clear water, with many islands, and, as the name implies, is supposed to furnish some trout fishing. Pickerel and pike are very plentiful in Apishingquaquaga Lake, particularly so at the falls at the south end where the stream enters. This falls is the only one we encountered within the limits of our survey, but does not appear to be of much value as a water power, the stream being so low in July that one would have no difficulty in crossing it at the falls, without getting one's feet wet. However, if storage for water was provided on Lake Kenogaming it might be made of some value.

Forest fires were very prevalent and I believe that the township of Denton is

nearly all brulé now.

Accompanying this report are field notes, plan of survey, accounts in triplicate and the customary affidavits.

> I have the honour to be, Your obedient servant, (Signed) HERBERT J. BEATTY, Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 32.

SURVEY OF THE TOWNSHIP OF BLOUNT, DISTRICT OF NIPISSING.

DELTA, ONT., July 27, 1909.

SIR,—Under your instructions, dated May 31st, 1909, I have surveyed the Township of Blount, in the District of Nipissing, and beg to submit the following

All lines were run with the transit, well opened up and blazed. Frequent observations of Polaris at elongation were taken as the survey progressed.

The iron bars furnished by your Department were planted and marked as directed and their places and markings shown on the field notes.

At the following points iron posts 1\% inches in diameter were planted.

At the intersection of the centre lines of the road allowances at the northeast angle of the Township marked "BLOUNT" on the south-west side and "R" on four sides.

At the intersection of the centre lines of the road allowances at the northwest angle of the Township marked "BLOUNT" on the south-east side and "R" on four sides.

At the intersection of the centre lines of the road allowances at the southwest angle of the Township marked "BLOUNT" on north-east side, "GLACK-MEYER" on south-east side and "R" on four sides.

At the intersection of the centre lines of the road allowances at the south-east angle of the Township marked "BLOUNT" on the north-west, "GLACK-MEYER" on the south-west and "R" on four sides.

At the following points iron posts 11/4 inches in diameter were planted:

At the intersection of the centre of the road allowances along the east boundary of the township and the centre of the road allowance between concessions VI. and VII.

At the intersection of the centre of the road allowances along the north boundary of the township and the centre of the road allowance between lots 12 and 13.

At the intersection of the centre of the road allowance along the east boundary of the township and the centre of the road allowance between concessions VI. and VII.

At the intersection of the centre of the road allowance along the south boundary of the township and the centre of the road allowance between lots 12 and 13.

At the intersection of the centre of the road allowance between concessions VI. and VII. and the centre of the road allowance between lots 12 and 13.

A careful traverse was made of the Abitibi River. With the exception of Island "A," at the head of the Long Soo Rapids, the others are simply sand bars which are submerged in ordinary stages of high water.

The general level of the country is from sixty to one hundred feet over the Abitibi River.

Soil—clay and clay loam, covered with vegetable mould and moss. Rock exposures in the Long Soo Rapids are gneissoid.

Timber—spruce, poplar, white and yellow birch, balsam and willow, varying in diameter from a few inches to two feet.

The Abitibi and Chin Rivers afford good drainage facilities. The Abitibi varies in width from five to ten chains. The Chin from three to five rods.

The Long Soo, commencing at Island "A," is a succession of rapids and falls about five miles in length. There is also a very strong current from the foot of the rapids to where the river crosses the west boundary of the township. A dam placed at the foot of the rapids, or lower down the stream, of sufficient height to raise the water, say, five feet over still water level at Island "A" (at low water level) would back water over two small rapids in the township of Glackmeyer and give unbroken navigation from the dam to the G.T.P. Railway crossing and beyond to Iroquoi Falls and afford or supply electrical power for manufacturing purposes at the dam and at the railway crossing.

When the township is opened up for settlement the present colonization road running north from Cochrane should be continued to and across the Abitibi River on the side road between lots eighteen and nineteen; there is good foundation for a bridge in the rapids.

In my opinion the township should not be opened for settlement until there is a local market for pulpwood at the railway crossing or at the dam. The wood would pay for clearing and encourage settlement.

Moose are plentiful and a few common deer and beaver. Partridge, plentiful. Accompanying this report you will please find full returns of survey.

I have the honour to be,
Sir,
Your obedient servant,
(Signed) Walter Beatty,
Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 33.

TOWNSHIP OF WABIGOON, DISTRICT OF KENORA.

TORONTO, February 4th, 1909.

SIR,—I have the honour to submit the following report of the survey of the Township of Wabigoon, in the District of Kenora, made under instructions from your Department, dated July 29th, 1909.

This township lies north of the Township of Langton and east of the Town-

ship of Smellie. The lands to the north and east are as yet unsurveyed.

In August last I took an assistant and two chainmen from Toronto, and went by train to Owen Sound, thence by boat to Port Arthur and on to Kenora by train, where I obtained good men and provisions, through the Hudson's Bay Co., and then came back by train to Vermilion Station on the C. P. Railway, from where I intended to make a start for the work by wagon, but owing to my becoming ill from poison, it was necessary for me to abandon the work for a time and come home again until I got strong enough to again go on with the work.

In the latter part of October, I again started from home by the same route as before, and arrived at the work on November the 3rd, and commenced the survey next day, using solar instruments. We had good weather, with quite a lot of sun shining for the first ten days, then it became cold and stormy with very little sun shining. The lakes and river became frozen over, so that our traversing and crossings of same were generally made on the ice.

All the posts were made of the most suitable wood to be found, of good size, sound and well marked with a scribe, and all the iron posts were well marked with a cold chisel, and placed alongside of the wooden posts where directed.

At the following points iron posts 11/8 inches in diameter were planted:

Fifty links north from the intersection of the east boundary of the township with the northerly shore line of a bay of Wabigoon River.

At the north-east angle of Lot 1, Concession VI., marked on the south "CON. VI.", on the west "LOT 1" and on the south-west "WABIGOON."

On the north boundary Lot 12, Concession VI., sixty three links east of the intersection with the shore of the lake at the north-west corner of the township marked on the south "CON. VI." on the south "Lot 12" and on the south "WABIGOON."

On the post 1% inches in diameter planted by O.L.S. J. J. Frances on the south boundary of Lot 12, Coneession 1, near the intersection with Corner Lake, I marked on the north "CON. 1," "LOT 12" and "WABIGOON."

At the following points iron posts 11/4 inches in diameter were planted:

At the south-east corner of Lot 1, Concession 1, marked on the west "CON. 1," "LOT 1" and "WABIGOON."

At the north-east angle of Lot 1, Concession III., marked on the north "CON. IV.," on south "CON. III." and on west "LOT 1."

At the north-east angle of Lot 7, Concession VI., marked on the south "CON. VI.," on east "LOT 6" and on west "LOT 7."

At the north-west angle of Lot 12, Concession III., marked on the south "CON. III.," on north "CON. IV." and on east "LOT 12."

On the east boundary Lot 7, Concession I., twenty-five links north from the intersection with the shore line of Roderick Lake, marked on east "LOT 6," on west "LOT 7," on north "CON. I." and on south "31.00eh."

On the point of land on east side of Shallow Lake where the line between Lots 6 and 7 produced crosses said point, marked "VII." on west and "VI." on east.

The township generally is rough and rocky, especially along the boundaries, and the low parts are swampy.

TIMBER.

The timber throughout the whole township is pretty much mixed, being spruce up to ten inches in the swamps, small areas of jack pine up to ten inches on the more level portions, and small jack pine, poplar and birch on the ridges. There are a few good trees of white pine growing in the south west corner of LOT 5. Con. 5, where the engineers for the G. T. P. are camped.

MINERALS.

No minerals of any economic value were found, and the needle was found to be quite steady, showing no indication of magnetic ore.

FARM LANDS.

There are some good lands for agricultural purposes on Lots 4, 5, 6, 7, 8 and 9 in the southerly part of Con. 6, and Lots 3, 4, 5, 6, 7, 8, 9, Con. 5, and Lots 6, 7 and 8, Con. 4. The soil is clay and generally level. What soil there is in the rest of the township is sandy, especially in Cons. 1, 2 and 3.

SETTLERS.

There are several settlers in the township whose names, amount of improvements as well as the lots they wish to take up, and where they are living, are all given in forms for this purpose.

GAME.

Some moose, red deer and wolves were seen, also many rabbits, partridges and ducks.

Corner Lake is being used by men engaged in the fishing business. The fish are taken to Vermilion Station on the C. P. Railway in wagons and shipped from there.

WATER POWERS.

There are two good water powers on the Wabigoon River, one at the crossing of the G. T. P. Railway, in the north-west corner of Lot 6, Con. 5, known as the Lower Falls.

This fall is about 18 feet high and would develop about 8,000 h.p. This is a valuable power and could be increased with a dam, which could easily be built at the head of the falls, which would back the water up into Shallow Lake, and thus give a large area for storage purposes. And I would recommend that the north-west corner of Lot 6, Con. 5, the north-east corner of Lot 7, Con. 5, the south-

west corner of Lot 6, Con. 6, and the south-east corner of Lot 7, Con. 6, be reserved for this power. There is also an additional fall of about ten feet between this fall and the north boundary of the township.

The other water power is up the river and about the middle of Lot 2, Con. 3, and known as the Upper Falls. This fall is about ten feet high and would develop about 4,000 h.p. I would also recommend that the land, both sides of the river, here, be reserved for this power.

I have the honour to be,
Sir,
Your obedient servant,
(Signed) G. S. Abrey,
Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 34.

ALGONQUIN PARK P. O., November 14, 1910.

The Honourable The Minister of Lands, Forests and Mines, Toronto, Ont.

HONOURABLE SIR,—I beg to hand you report on the Algonquin National Park for 1910.

It gives your Superintendent and staff a great deal of satisfaction to know that you have during the past year visited a number of our lakes and streams, and seen for yourself the condition of at least a part of the great preserve under our care.

The work during the trapping season consisted principally of patrolling the Park. This, I feel, has been attended with good results. Several parties have been convicted and heavily fined or imprisoned, and I trust the penalties imposed will be a wholesome lesson to those who have made a practice of breaking the law by trapping and hunting in the Park. I regret to state that some of our trouble has come from lumber camps throughout the Park, and I feel that in some way the lumber firms and their foremen should be held responsible for the actions of the men in their employ. Some firms, I am glad to say, do all in their power to help us, while others do not do so.

We have had several small fires in the Park. The worst of these were caused by the Grand Trunk Railway at a point east of headquarters on the Madawaska River. While no great loss in timber was sustained, from a scenic standpoint the fire was very regrettable. Excellent work has been done by our staff in handling fires, especially the one on the mountain overlooking Cache Lake. Here every tree was fought for, and the fire was confined to a small area. In the matter of fires, I think that the railway company should exercise more caution in burning rubbish and piles of old ties along the road.

Game of all kinds is very plentiful, and is filling up the surrounding country very rapidly, especially beaver and mink; the latter being very noticeably on the increase this year. Otter, martin and fisher are also very plentiful, while deer are

in great abundance everywhere, not only in the Park, but also on all sides out of the Park limits, nearly all hunting parties getting their number in a few days. One old hunter this morning, who belongs to a party whose rule is not to kill a doe, remarked that he must have seen fifty deer in one week, while the Barnet party at Lake Louise shot eight in one day. This certainly goes to prove that the Park is a great feeder for the surrounding country.

Notwithstanding the fact that we took out over three hundred beaver over a very small area this year, I find, upon careful personal examination, that there are still a large number on the same waters. Few stop to consider how enormous must be the annual increase of wild life new over this vast area, or the valuable asset this is to the Province. I have before me a carefully prepared estimate of the number and value of the different fur-bearing animals actually sold in Canada and the United States in the five years between 1899 and 1905, all kinds of which we have here in abundance. As it may not have some under your notice, I thought it might interest you, as it shows the value of an asset that most people overlook:

Beaver	375,500	skins	valued	at	\$2,290,550.
Bear	123,500	"	66	"	1,018,875.
Fisher	35,400	"	"	"	217,710.
Foxes	537,415	"	"	"	3,641,720.
Canadian lynx	266,000	"	"	"	1,662,500.
Martin	727,000	"	"	"	6,361,250.
Mink	2,525,000	"	"	"	7,196,250.
Muskrat	32,800,000	"	"	"	4,756,000.
Otter		"	"	"	2,609,250.
Raccoon	3,485,000	"	"	"	3,066,800.
Skunk		"	"	"	6,735,500.
Weasel and ermine	144,000	"	66	"	139,550.
Wolf	498,000	"	"	"	672,300.
Wolverine	8,350	"	"	"	47,175.

making a total of nearly forty and a half million dollars, and values have advanced very much since these dates. The above estimate is by Andersch Brothers, of Minneapolis, Minn., while the report of the United States Commission of Fish and Fisheries shows that since the year 1902 the yield of mink is of much more value than that of seal.

Fishing has been excellent during the past year. I would, however, recommend stocking Cache and White's Lakes during the coming season, as these lakes furnish sport for visitors who cannot go further afield.

Partridge and ducks are much more numerous than in former years. This year a quantity of wild rice and celery has been sown with a view to increase the food supply of ducks. Capercailzie are also increasing, and some young birds are reported seen by our rangers and others.

Visitors to the Park have been much in excess of former years.

We have erected new shelter houses at the following points: Island, McIntosh, Misty, Cedar and Eagle Lakes. These are all substantial, well-finished buildings. A good deal of trail cutting has been done and a lot of general improvements made. The houses at headquarters have been painted and enlarged. Some of my men also accompanied your bush rangers while making an estimate of the timber on the berths held by the Munn Lumber Company. This firm commenced

operations here during the past summer, and had the Department not made an effort to save the timber, not only would the beauty of the Park have been destroyed, but a slash would have been left that would make it impossible to save the balance of the woods from fire, which would mean a loss that would be hard indeed to estimate.

Our staff has been increased to twenty men, and I look for a good year's work during the coming year.

I am, Sir,
Yours very truly,
G. W. BARTLETT,
Superintendent.

Appendix No. 35.

RONDEAU PARK, MORPETH P.O., Nov. 14, 1910.

To the Honourable the Minister of Lands, Forests and Mines, Toronto.

SIR,—I have the honour to submit this my report as Caretaker and Ranger of the Rondeau Provincial Park for the year ending October 31st, 1910.

In looking over my last year's report, I find that some of the improvements that were suggested for the Park this season have been carried into effect, and some have been laid over for another season. We went over the road near the lake shore leading to the upper fisheries, and filled up a number of holes, thus greatly improving its condition, especially for those who frequent the road with autos and other vehicles.

The work that is being carried on at present is the levelling of the grounds around the pavilion and covering it with marsh grass. After ploughing, scraping and levelling the knolls and sand drifts, we sowed suitable grass seed (as an experiment), thinking that when it was all covered with grass a foot thick the seed would germinate and grow in the spring. This covering will help to retain the moisture that is necessary for the growth of the young grass. We are cutting and putting up a few small stacks extra of the grass, so that if any part of the present covering should wear thin by the traffic over it, we can put on more as it is required. The cost of this work will not exceed \$200.00.

We covered a small patch of this sand with grass this summer, and it not only made the soft sand quite firm for walking and driving on, but the seed of the natural grass that we used to cover it with germinated and came up quite thick in places. Our experience with this small patch is what led me to recommend covering all the bare sand in this way. To cover the same ground with clay and gravel, which was at first spoken of, would cost upwards of \$1,200.00. This amount of clay and gravel drawn over the Park road (which is in excellent condition now) would, in all probability, cut it up so that it would have to be re-gravelled; but as it is now, all the road will require for 1911 will be to go over it with the heavy road scraper in the spring.

The repairs that we put on the Park dock last year are in very good condition as yet. The muskrats made a little trouble on the low dock or sand approach. The life preservers served an excellent purpose this season; they were the means of preventing two or three drowning accidents.

We fully expected to have had the pavilion overhauled and put into good condition this season, and I would renew my recommendation that this be speedily done. Owing to the bad condition of the floor, posts, railing, etc. (being decayed or badly worn), it has not been used nearly so much this season as it was in former vears. I would urge the Department to have this building thoroughly overhauled early next spring, and have it put in good condition by the first of June.

Another very necessary work that would benefit the Park and would add to the comfort and health of its visitors, is a ditch or drain to be dug from the big slough or swale across the ridges, emptying into the Eau, a short distance south of the summer cottages. This swale is flooded nearly every spring, causing a breeding ground for mosquitoes, and also injuring the drinking water in the wells close by. A 12-inch tile carefully put in would carry off all the flow of water if a small dam, say, two feet high was raised to force the water through in case of an extra heavy flow. This would not cost much in proportion to the benefit that would accrue. The Department has given every encouragement and all the assistance possible towards getting a sufficient supply of good wholesome drinking water for the Park. Under their direction a deep well was sunk to the soapstone rock, and water was found, which, after examination by Dr. Amyot, Director of the laboratory of the Provincial Board of Health, Toronto, was pronounced of good quality; but it seems that the steel shoe on the casing was not located properly on or near the rock, so as to prevent the gravel and sand getting in at the bottom and stopping the free flow of water into the pipe. We have a deep well expert working at it now, and he is satisfied that the well will give us plenty of water when he gets through with it. If the well proves satisfactory I would urge that the Department go on and put in the proposed water system on the Park for next season.

We finished claying the base ball ground this spring, and put it into good condition at a cost of \$150.00.

It has been strongly urged, especially by people who visit the Park in autos and those who take an interest in the Park forest, that a good drive road be built and maintained through the north-westerly part of the forest, beginning where the good road into the Park now ends, and continuing through the bush to the bar, and along the bar about half a mile or less, which would meet the south or Lake Shore road, thus forming a belt line around the Park. This would make one of the most beautiful and popular driveways in this western peninsula.

Mr. Arthur Orendorf has, as usual, given very satisfactory service in the refectory this season, catering to the wants of those who visit the Park; also the boat livery service was very satisfactorily managed by Mr. F. Weir. He built a small temporary addition to his boat-house for bathers (men and boys) to go into and change their garments, and he also kept a supply of bathing suits for hire. The number of visitors seems to be increasing each year. This is becoming a favourite spot for automobile parties from the surrounding country and towns.

The herd of deer running at large in the wooded portion of the Park has largely increased, and must now number at least one hundred individuals. They may frequently be seen coming down in the evenings to feed on the open grounds

in front of the Ranger's house, returning to the forest in the morning.

I have the honour to be. Sir, Your obedient servant, ISAAC GARDINER,

Ranger.

Appendix No. 36.

Survey of Township Outlines in the Porcupine Mining Division, Temagami Forest Reserve.

SAULT STE. MARIE, ONT., August 9th, 1910.

SIR,—I have the honour to submit the following report upon the survey of certain township outlines in the Porcupine Mining Division, in the Temagami Forest Reserve, made by me under instructions from your department, dated April 28th, 1910. The survey was commenced early in May and carried on as rapidly as circumstances would permit, and completed early in July

Our first meridian line was run due south astronomically 24 miles from the

18th mile post on O. L. S. Niven's first base line.

Our second meridian line was run south 6 minutes west astronomically 11 miles and 79 chains; thence south 6 minutes east astronomically 12 miles, 2 chains and 90 links.

Our first base line was run from a point on our first meridian line 6 miles south of O. L. S. Niven's first base line, due west astronomically 6 miles, 1 chain and 80 links, to our second meridian line, and due east astronomically from the said point 5 miles, 79 chains and 20 links to O. L. S. Watson's meridian line.

Our second base line was run from a point on our first meridian line 12 miles south of O. L. S. Niven's first base line, due west astronomically 6 miles, 3 chains

and 62 links, and due east astronomically 6 miles, 1 chain and 58 links.

Our third base line was run from a point on our first meridian line 18 miles south of O. L. S. Niven's first base line, due west astronomically 6 miles and 70 links, and due east from the said point 6 miles, 2 chains and 37 links.

Our fourth base line was run from a point on our first meridian line 24 miles south of O. L. S. Niven's first base line, due west astronomically 5 miles, 78 chains and 10 links, and due east astronomically from the said point 6 miles, 3 chains and 16 links.

At the south-east corner of the Township of Ogden, we intersected O. L. S. Watson's westerly meridian line 95 links north of his iron corner post. At the south-east corner of the Township of Price we intersected O. L. S. Watson's westerly meridian line 6 miles, 1 chain and 50 links east of our first meridian line measured along the base line. O. L. S. Watson's line had not been chained.

At the south-east corners of the Townships of Fripp and Musgrove we cut our line beyond our corner posts unblazed as O. L. S. Watson's meridian line, which forms the westerly limits of these townships, had not yet been run.

We encountered none of O. L. S. Beatty's lines.

PHYSICAL FEATURES.

In general, the surface of the country west of the Mattagami River is level and swampy, and to the east it is very rough and rocky.

East of our first meridian line all the exposures of rock are schist, and west of this line what few exposures we met with are granite; none of the mining claims in the territory traversed have been surveyed. In fact, only on the cast side of the Grassy River did we intersect any lines.

8 L.M.

TIMBER.

The timber consists chiefly of jack pine, spruce, balsam and birch, with a preponderance of jack pine and spruce. The whole area is heavily timbered wih the exception of about 6 square miles in the extreme south of the Township of Musgrove, which was burnt clean in 1896. The jack pine and spruce are large; on the average 10 inches in diameter. There is only an occasional white or red pine tree, and in no place is there a stand of any commercial value.

WATERS.

The Mattagami River runs north through the middle of the Townships of Doyle, McKeown, Thornloe and Bristol. It takes the form of a lake (Kenogamisee Lake) to within 2 miles of the north boundary of the Township of Thornloe. At . this pointe the Wawaitan Rapids occur. Here there is a drop of 28 feet in about a mile. Below this point the river winds through high sand banks in a northerly direction and crosses O. L. S. Niven's first base line 1½ miles east of the 18th mile post. The average rate of the stream in this lower section is about three miles an hour.

The Grassy River runs north almost parallel to the first meridian at a distance of 1½ miles east of it, and joins the Mattagami River a quarter of a mile below the south-west corner of the Township of Ogden. At the point where the boundary line between the Townships of Fripp and Price crosses the river two miles east of our first meridian line, there is a rapid and a fall amounting to a drop of 80 feet; above this point the river runs smoothly, but below it to the junction with the Mattagami River the rate of the stream is about 4 miles an hour.

The Papagamika River is a crooked but navigable stream running north through the eastern part of the Townships of Price and Ogden; it enters the Mattagami River about 3 miles below O. L. S. Niven's first base line.

The Split Rock River (Katashkashabika River) is a navigable tributary of

the Papagmika River running parallel to it to the west and joins it somewhere in the Township of Ogden.

The Red Sucker River (Misqwamabinagenda River) rises in a lake of the same name 10 miles or so west of Kenogamisee Falls on the Mattagami River. It runs across the north-west corner of the Township of Thornloe and into the Township of Bristol, joining the Mattagami River at the south-east corner of the latter township. During its course through these two townships it is one continuous rapid. About 5 miles from the mouth of the river there is a fall of 12 feet.

There are no lakes in the area embraced worthy of mention.

FISH AND GAME.

In all the rivers and lakes, large and small, whitefish, pickerel, pike and perch are very plentiful. Below Wawaitan Rapids on the Mattagaini River and below the high falls on the Grassy River speckled trout averaging 3 pounds are in abundance. Lake trout are caught, to our knowledge, only in Kanamekosike Lake, which is 3 miles due west of the Wawaitan Rapids on the Mattagami River.

There are large numbers of moose over the entire area and caribou are fairly plentiful in the eastern section of the Townships of Ogden and Price. Partridge

are very plentiful this season.

Accompanying this report we submit plans and field notes and also accounts in triplicate.

We have the honour to be,

Sir,

Your obedient servants,

(Signed) LANG and Ross,

Ontario Land Surveyors.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 37.

List of Persons holding Cullers' Licenses, issued under the Ontario Cullers' Act, up to 31st October, 1910.

	{	1	1
Name.	P. O. Address.	Name.	P. O. Address.
Anderson, M. M	Almonte.	Brandon, Martin W	Peterborough.
Allan, James D	Bracebridge.	Bell, John C	Peterborough.
Appleton, Erwin B	Bracebridge.	Bartlett, George W	Warren.
Albert, Andrew		Brown, Silas	Kleck's Mills.
Adams, J. Q	Longford Mills.	Boland, W. G	Eganville.
Anderson, Patrick J	Campbellford.	Baulke, George R	
Anderson, J. C	Gravenhurst.	Bouchey, Arthur	
Allan, Alfred	Ottawa.	Buchanan, Mark	Trout Mills.
Allen, R. A	Bannockburn.	Barrett, W. J	Thessalon.
Alkins, Geo. M		Bromley, Thomas	Pembroke.
Appleby, Ridley	Katrine.	Bremner, John L	Admaston.
Adams, James M		Breen, Bernard	Garden River.
Aylward, James	Peterborough.	Bule, Dougal	Providence Bay.
Archibald, John L	Reewatin.	Baker, Thomas	Blind River.
Austin, Wm. G	Kenirew.	Blais, Felix	
Anderson, Charles	Cortion	Balsdon, George	Reewatin.
Anderson, John		Bromley, W. H	Tittle Current
Adair, Thomas Albert		Bowers, Isaac	Parrio
Anderson, J. G	Arden	Brown, Thomas	W Huntingdon
Adams, Wm		Bates, Robert	Kenora
Arkle, George		Binnie, Thomas	Port Arthur
Armstrong, Jas. Theodore.		Blair, William	Keewatin
Armstrong, Thomas J		Bick, Thomas	Bohcavgeon
Acheson, Ira M		Burke, John Thomas	Midland.
Albert, Alfred E		Buchan, Sterling	L'Original.
Alma, John E	Hawkeshury.	Brown, Joseph A	Snanish.
Adams, George A	Longford.	Baird. P. C	
Ansley, John Albert	Thessalon.	Brill, J. W	
Ansley, John Jenkins	Thessalon.	Beattie, Arthur W	
Ainslie, Alexander	Spanish.	Brock, H. S	
Apleton, E. A	Kenora.	Benson, John Bird	Midland.
Arnill, William	Iron Bridge.	Brennan, Rich'd Lawrence	Peterborough.
Adams, Fred	L'Original.	Brown, Hugh Riside	
Alexander, R. Harvey		Bryan, Frank	Keewatin.
Alexander, J. Albert	Spragge.	Bennett, Edward Clinton.	
Ainslie, Donald McF	Whitestone.	Blaine, Harvie Thomas	
Ansley, William	Thessalon.	Barrett, Thomas	Barrie.
	N	Bickell, James Manuel	Sault Ste. Marie.
Brophy, Michael Patrick.	Massey Station.	Buisson, William	Sudbury.
Boland, Abraham	Droschridge	Borrett, James A	Sault Ste. Marie.
Brown, Singleton	Hagtings.	Bliss, C. Lidden	Kinmount
Barry, Thomas James	Ottown	Bray, James	Arnnrior
Blanchet, Paul Fred'k	Parry Sound	Bremner, George Bromley Samuel	Pembroke
Bird, W. S Bayley, James T	Gravenhuret	Brown, A. C	Fitzrov Harhour
Dayley, James 1	Ottawa.	Berlinquet, Julius	Onimicon, Que
Bell, Henry Beach, Herbert Mahlon		Blastorah, Fred L	Harwood.
Barry, Thomas	Millbridge.	Burns, Clifton H	Little Current.
Beat's, W. R	Parry Sound.	Beaumont, Ernest	Parry Sound.
Brooks, Frederick Wm	Mackay's Station.	Beattie, Alex	Whitney.
Brown, Robt, D	Port Sidney.	Brennan, Reginald	Gravenhurst
Breed, Arthur G	Penetanguishene.	Boyd, George	Gravenhurst
Barnes, Thomas Geo. Lee.	Muskoka Mills.	Bissell. Geo. Thomas	Trenton.
Buchanan Robert	Coldwater.	Baxter, Richard	Deseronto.
Beck, Jacob Frederick	Penetanguishene	Breeaugh, Edward	Deseronto.
Bird, Joseph Manly	Muskoka Mills.	Boyd. Geo. A	Thessalon.
Boyd, John F	Thessalon.	Buchan, Frederick	Arnprior.

Name.	P. O. Address.	Name.	P. O. Address.
Paraett Patrick	Arnorior	Coin Pohort	Midland.
	Arnprior.		
	Pembroke.	Crawford, Stephen W	Peterboro.
,	Eganville.		
	Arnprior.	Coburn, JohnCrowe, Nathaniel	Boheavgeon
	Sturgeon Bay.		
	Penetanguishene. Coldwater.	Cameron, Alexander	
	South River.	Chrysler, Frank R. L	
During, Cr. III, Criticist		Callaghan, Thomas, Jr	
	Burk's Falls.		Kenora.
	Labelle, Q. Barwick.	Calder, George	Tomphollford
Diada, acorbottititi	Muskoka Mills.	Callaghan, Dennis	Emo
		Corrigan, Robt. T	Lillo.
	Renfrew.	Cameron, John H	Kenora.
Brown, James	Buckingham, Q.	Carson, Melvin	Churich Divor
	Blind River.	Cameron, John K	Little Current
	Nairn Centre.	Cassidy, William	Little Current.
	Sault Ste. Marie.	Coons, Geo. Washington	Coult Sto Mori
	Barwick.	Chisholm, Geo. Leopold	Dinkondolo
Beattie, W. J	Westmosth	Clark, Wm. J	Birkendale.
Bromley, William	Westmeath.	Carr, Herbert E	North Bay .
Bissell, Hartie	Tremton.	Cochrane, Alfred L	Fort Frances
Brown, Robert	Manhanahana	Campbell, George	
Beaton, Hugh	Waupausnene.	Chalmers, George James	-
Bailey, Arthur	Parry Sound.	Caverly, David Charles	Parry Sound.
Burd, James Henry	Parry Sound.	Campbell, Archibald J	
Bailey, Samuel James	Oriilia.	Close, John L	
Burton, Tinswood	Renirew.	Carmichael, Donald	
Boyes, James	Huntsvine.	Carty, John	Arnprior.
Brown, John	Rockdale.	Cleary, Patrick M	Collender
Brennan, Edward Scott	Sunariage.	Caldwell, James M	Daridgen Oro
Bell, John Arguey	KIOCK S MIIIS.	Cushing, John J	Thegaelen
Bromley Edw. H	Pembroke.	Crebo, William	Manager Chattan
Bliss, Lawrence E	Byng Inlet.	Cullen, Michael J	
Buee, Neil	Spanish Station.	Cuthbertson, William	Arnprior.
Brazziel, Leonard	Spanish Station.	Carss, Percy	Thessalon.
Bowie, James	Bryson, Que.	Coghlan, Michael	
Barrie, Nicholas J	Uttawa.	Cameron, Alexr. Gordon	Beauchene, Que
Burke, J. D	Kenora.	Cassaday, W. W.	Emo.
Bowen, Thomas	Deseronto.	Carter, Robert E	Fesserton.
Brown, James F	Baysville.	Coleman, Jos	Baysville.
Blastorah, Bernard	Harwood.	Cardiff Geo. McDougall	Suggery.
Brannan, William H	remoroke.	Cameron, W. D	Kenora.
Bromley, Thomas	Webbwood.	Crandall, F	Fort Arthur.
Barr, J. C	Mine Contra	Campbell, James R	
Bradley, J. M	Mahbwas 2	Campbell, John A	Ampris-
Burns, Dominick	Wennwood,	Caillier, Hyacinth	Pohorecon
Blaikie, Campbell D	Stratton	Chamberlain, Thomas	
Bury, Henry J	Stratton.	Cooper, David Allan	Dollarica Or-
Jameshall Dake of Yele	Flinton	Cox, Henry	Danierica, Que.
Campbell, Robert John	Arpprior	Currie, James	Ottawa.
Carpenter, John A	Tropton	Clarkson, A. E	Midiand.
Campbell Alex J Carson, James	Dragobridge	Clairmont, E	Gravennurst.
carson, James	Pracebridge.	Cameron, W. F.	Crowenhandt
Campbell, J. M	Draceuridge.	Connolly, David	Gravennurst.
Campbell, Robert	Comphellers	Campbell, P. C	Daun Ste. Mari
Clairmont, Joseph	Dampuelilord.	Cadenhead, Alexander	Mildiand.
Clarkson, Robert J	Parry Sound.	Carpenter, R. J	Arnprior.
Carruthers, Aaron	Hintonburg.	Christie, William Pringle.	Severn Bridge.
Calder, Wm. J	Bark Lake.	Campbell, C. V	Sault Ste. Mari
Chew, Joseph	Gravennurst.	Clegg, Samuel	
		If the decimal and A TETATIAN TO	it indured hungt
Cole, James Colin Cameron, Wm	Galliana.	Clairmont, William L Cook, Sydney P. W	Gravennurst.

			-
Name.	P. O. Address.	Name.	P. O. Address.
Corrigan. John	Baysville.	Donally Bishard S	Sudbury.
Chalmers, Alexander M	Peterboro'.	Donally, Richard S Devine William	Cook's Mills.
Charlton, George A	Collingwood.	Durrill, William	Nosbonsing.
Cahill, Thomas	Nosbonsing.	Draper, Patrick	Quyon, Que.
	Midland.	Davis, J. P	Bobcaygeon.
Cooper, James Eddly	Saurin.		Birkendale.
Cook, Reinhardt	South River.		Huntsville.
Crowe, Cecil	Bobcaygeon.	Drum, Patrick	Belleville.
Callaghan, Dennis	Trenton.		Rosseau.
Collins, James	Barryville.	Duquette, Chas	Webbwood.
Claffey, Edward D	Fort William.	Davis, William Albert	Bobcaygeon.
Coyne, Phin	Chelmsford.	Dickson, Robt. Alexander.	Keene.
Constantine, Eudore	Blind River.	Dawkins, John	Gravenhurst.
Cameron, Ewan	Gordon Lake.	Doxsee, James E	Gravenhurst.
Campbell, Daniel N	Buckingh'm, Que.	Didier, L. P	
Canniff, R. W	Kenora.	Devine, Patrick J	
Cassidy, S. C	Dunchurch.	Dinsmore, Richard	
Charleston, John Baptiste.	Ottawa. Tweed.	Dunn, Percy E	
Comer, Billa F	Sundridge.	Duval, Chas	
Corrigan, Robt. J	Emo.	Donlevy, James Doris, Patrick	
Caswell, Grant	Coldwater.	Doris, John	
Caswell, Geo	Coldwater.	Donahue, Michael	
Chemir, David A	Pembroke.		Belleville.
Clairmont, Philadelp L	Gravenhurst.	Dickson, Robert R	
Crowe, Edgerton	Bobcaygeon.	Donlevy, Wm. C	
Castonquay, A. C	Chelmsford.	Duff, Chas. A	
Clark, Donald Allan	Port Arthur.	Dean, James C	
Charette, Herbert	Devlin.	Duff, Peter A	Claybank.
Christie, Uriah W	Fort Frances.	Duncan, Downey	Rainy River.
Clark, Joseph C	Fort Frances.	Dougherty, J. M	
Crowe, Leslie	Bobcaygeon.		Spanish Mills.
Campbell, Duncan W	Stewartville.		Blind River.
Callahan, Thomas N	Arnprior.	Devitt, Frank	
Clements, Albert James	Bent River. Sault Ste. Marie.		Port Arthur.
Carney, Albert	Massey Station.	*	Keewatin.
Carter, George	Lavelle, Que.	Devlin, Samuel	McLaren's Bay.
Chitty, Alfred E	Kenora.	Dougherty, W. II.	menarens bay.
Cardiff, Richard J	Arnprior.	Enlaw, Oliver	Campbellford.
Conway Thomas	Barry's Bay.		Pembroke.
Costello, Thomas M	Antrim.		Arnprior.
Cross, R. J	Silver Islet.		Westmeath.
Clark, R. H	Port Arthur.	Errington, Joseph	Sundridge.
Clark, Wm. R	Port Arthur.	Eddington, Henry John	Parry Sound.
			Port Arthur.
Didier, Hector	Mattawa.	Eager, James	Parry Sound.
Doran, Frank	Barryvale.	Elliott, Porter P	Mine Centre.
Dunning, E. Percival	Parry Sound.	Elliott, William	Cache Bay.
Duff, R. J.	Arnprior.	Edgar, J. E	Rat Portage.
Durrill, John W	Ottawa. Sundridge.	Elliott, George E	Gillies' Depot.
Dickson, John Dickson, James L	Michipic'ten H'r.		Fort Frances.
Doble, Harry	Sault Ste. Marie.	muruge, nober	POLU PIANCOS.
Deacon, Charles	Sault Ste. Marie.	Fraser, John A	Kenora.
Danter, R. W.	Parry Sound.		Red Bay.
Doyle, T. J.	Eau Claire.		McLean's Depot.
Doble, Alexander R	Blind River.	Fitzgerald, E. Clair	
Darling, J. M	Wisawasa.	Farrell. W. H	Ironside, Que.
Dillon, John	Calabogie.	French, Lewis William	Byng Inlet.
Durrell, Jos. Nelson	P'rt'ge du F'rt, Q.	Fraser, William A	Mattawa.
Durrell, John	Callender.	Finerty, Patrick	Rochfort.

Name.	P. O. Address.	Name.	P. O. Address.
Farnand, Frank	Diamond.	Green, Samuel E	Parry Sound.
Fulton, Philip S	Spanish Station.	Grant, John	Flinton.
Fitzgerald, Ullyot C	Parry Sound.	Green, Arthur	
Fenn. George	Bracebridge.	Green, Norman McL	
Fortune, Owen	Trenton.	Gillis, John J	
Fraser, David	Norman.	George, R. W	
France, John	Pavevillo	Gardiner, John	
Ferguson, Ernest A Ferguson, Alpen	Mattawa	Golden, Frank J Garson, Robert	
Ford, John William B	P'r'tge du F'rt. O.	Gropp, August	
Ford, Charles	Wahnapitae.	Grozelle, Antoine D	
Findlay, J. H.	Braeside.	Goulais, James	
Fraser James	Renfrew.	Grayson, Charles	
Fairen. Francis	Peterborougn.	Gladstone, Harry E	
Faulkner Jos	F'esserton.	Guertin, Oliver	
Fraser, Alexander, Jr	Westmeath.	Gelinas, Frank	Hull, Que.
Fairbairn, William	Calabogie.	Gwynne, John	
Fraser, Wm. A	Pembroke.	Gray, Frederick M	Brule Lake.
	Pembroke.	Graham, Edward G	
Fraser, Wm	Pombroke	Griffin, James	Spanish River.
Fraser, Hugh Alexander	Lindsay.	Gordon, Alexander B Gareau, Noah J	Pembroke.
Flaherty, John		Gillies, D. A	Carloton Place
Fox, Thomas	Deseronto	Gilligan, Edward	Mattawa
	Sturgeon Bay.	Gladman, Charles	Parry Sound
Fairbairn, N. H	Webbwood.	Garrow, John D	Ottawa.
Friel, John	Trenton.	German, William Burton	Wahnapitae.
Fox, Charles	Trenton.	Gordon, Robert W	Pembroke.
Featherstonehaugh, W. H	Penetanguishene.	Guertin, Nelson	Petawawa.
Friar, Schuyler	Westmeath.	Gardner, John	Kenora.
Farren, Joel		Gunter, Peter M	Gilmour.
Fraser, Duncan		Glennie, William	Millbridge.
Fraser, John	Burk's Falls.	German, Maurice J Gillies, John A	Fenelon Falls.
Fitzgerald, D.C	Spanish Station	Goddin, Edward	Braeside.
Foster, Wm. C	Searchmont	Grant, Joseph	Econvillo
Frazer, Jas. C	Spanish Milla	Gilmour, James B	Braceido
Fremlin, H. P	Richards' Land'e	Gorman Joseph P	Sault Ste Marie
Foster, Ed. G	Sault Ste Mario	Gordon, Thomas A	Hall's Bridge
Farrel, Peter M	Whitefish	Gray, Albert H	Riscotaging
Fairhall, Edward	Whiteside	Gadway, John	Parry Sound
Fraser, Levi	Bracebridge.	Garrow, Edward	Wehhwood
Fiddes, James	Rainy River.	Golding, William	Dorset.
Frawley, Frank	Orillia.	Gillies, Harry Gordon, Herbert C	White Lake.
Fisher, George	Sault Ste. Marie.	Gillespie, M. H	Nelson.
Farrier, John William	Chapter,	Griffin, William	Cook's Mills.
Finney, Benjamin B	Chapleau.	Ganton, David	Huntsville.
Follis, Frank C	Hawkesbury.	Kiraham George L.	A
Fortune, Percy H	Blind River	Granam, Frederick S	Arnnriar
Fraser, Wm. Foster	Sault Sto Monia	GIII, Cuthbert	Orillia
Fraser, Allan H	Thessalon.	Graham, James Robert	Konora
Farquharson, James	Tomiko	Graham, Thomas Jordan	Ryng Inlet
Fink, John	Mattawa.	Gaudaur, Antoine Daniel	Orillia.
	Mark Special Contractions and	Gorman, Patrick	Eganville.
Griffith, Geo. F	D. 1 .	Guy, Charles	Fort Frances
Graham, John	Arnprior.	Graham, George H	Gillies Denot
Golden, John		Greer, George P	Port Arthur.
Gunter, Henry M		Gill, Charles	Fort Frances.
dunter. Henry M			
Goltz, Ernest		Gorman, Michael J	Englenart.

Name.	P. O. Address.	Name.	P. O. Address.
Greer, Samuel H	Gore Bay	Howard, William	Baysville
Gilbert, Sidney N		Hogan, Enos W	
		Horne, John T	
Hale, Thomas		Hamilton, Chas. E	
Hogan, Albert J Hagen, Edmund G		Henderson, Leonard Hunter, Thos	
Hagen, Wilson		Hamilton, Robert J	
Hurd, Cyrus		Hawkins, William A	Pembroke.
Henderson, Albert E		Herring, Edward C	
Hale, John B		Hatch, J. W	
Hickerson, Melvin T		Hoard, Wm. Paris	
Howey, George H		Hartman, W. R	
Hartt, James		Hill, Ernest L	
Hayes, James		Hasleton, Constantine	
Huckson, A. H		Hamilton, A. J.	
Handley, Robert		Heggart, E. C	Trout Mills.
Howe, Alexander		Hunt, Ronald E	Massev.
Hurd, Edwin	Hurdville.	Hurd, Asahel	Parry Sound.
Huff, J. S. Morris	Arnprior.	Howe, Peter	Fort Frances.
Halliday, Robert J	Lindsay.	Hammond, Samuel H	Fort Frances.
Hutton, John	Hutton House.	Hunt, Alex. D	Pearl River.
Hutchinson, Wm. E	Huntsville.	Invine Thee H	Dorner Cound
Hogarth, Joseph Rowan	Pembroke.	Irving, Thos. H	
Humphrey, John	Gravennurst.	Irving, Edward C	
Hall, David	Lovering	ii ving, Buwara cititi	Tionora.
Hartley, Charles	Peterhorough	Johnston, Ralph E	Port Arthur.
Hawkins, Henry Chas	Blind River	Johns, Frank A	Toronto.
Hines, Philip Wallace	Huntsville.	Jackson, Robert	Brechin.
Hudson, John Lewis	Combermere.	Johnson, Finlay	Bracebridge.
Hurdman, William H	Ottawa.	Jones, Albert	
Hughes, John	North Bay.	Johnson, Thomas	
Howie, R. G	New Liskeard.	Johnston, Archibald M Julien, Charles	
Helferty, Dennis	Eganville.	Junkin, Henry	
Hamilton, Robert	Kenora.	Johns, Frank	
Hoppins, Abiram Hoppins, Densmore	Kingston.	Jessup, Edward D	
Haystead, John	Poppy Cound	Johnson, Frank N	
Henderson, John Irwin	Bohcaveeon	Johnston, John	
Hartley, William	Millbridge	Johnson, S. M	
Higgins, John C	Peterborough.	Jones, Frederick James	
Harrison, John, Jr	Pembroke.	Johnston, William A Jervis, Henry	
Hawkins, E	La Breton Flats.	Jones, William	Foncion Falls
Henderson, Charles	Bracebridge.	James, Martin	The Flats.
Halliday, Frank	Parry Sound.	Johnston, James	Fort Frances.
Hall Charles Ass	Orillia.	Johns, Alexander	Callender.
Hall, Charles Asa Hearl, John	Callender	Jackson, John A	Barwick.
Howe, Isaac	Fort Frances	Johnson, Thomas	Fort Frances.
Halliday, James	Springtown	Johnston, George N	North Bay.
Huraman, J. A.	Ottawa	771-4 Od	T 4443 - D 443 -
Hawkins, Stonewall J	Meldrum Bay.	Kintree Stuart	Pollowille
Hinchcliffe, William	Gunter.	Kerby, John Kennedy, Robert	Marmore
Henderson, Arthur	Baysville.	Kirby, Louis Russell	Ottawa
Hillis, James M	Sutton West.	Kennedy, Timothy	Enterprise.
Harris V.m., Jr	Day Mills.	Kirk, Henry	Trenton.
Hogg, W. J	North Bay.	Knox, Milton	Ottawa.
Hoxie, E. P.	Katrine.	Kinseila, Michael Pierce	Trenton.
Hawkins, Walter Howard, James	Pembroke.	Kitchen, D	French River.
	LM:OVO TOTALLO	Kelly, Jeremiah	

	1	1	
Name.	P. O. Address.	Name.	P. O. Address.
Kelly, Ferdinand		Lowe, Thomas A	Renfrew
Kennedy, T. J		Livingston, Robert M	
Kenning, Henry		Londry, William E	
Kirby, D. F	Belleville.	Labelle, James	Waltham Que
Kirkpatrick, David	Lindsay.	Labelle, Eli	Waltham Oue
Kean, John F		Ladurante, J. D	Ottawa
Kellett, Fred		Ludgate, Theodore	Peterborough.
Kelly, Michael J		Lucas, Frank	Sault Ste. Marie
Kirk, William James		Lunam, Duncan	Collfield, Que.
Kerr, E. G	Thessalon.	Lott, George	Tranton
King, Napoleon	Mattawa.	Lawrie, John D	Parry Sound.
Kean, B. F	Orillia.	Lovering, George Francis.	Coldwater.
Kemp, Orval Wesley		Lucas. R. G	Christina
Kirk, Charles Barron	Queensborough.	LeBlanc, Edmund C	Chapleau
Kingsland, W. P	Ottawa.	Lavigne, John	Avlmer Que
Kerr, John B	Arnprior.	Landell, Charles S	Huntsville
Kennedy, Walter		Long, Henry Elisha	Mattawa
Kennedy, John		Lynch, W. H	Collingwood.
Knox, Wm. M		Laplante, Francis	Ryng Inlet
Kingston, Robert		Lindsay, James	Arnurior
Kearnan, Edward		Labelle, Michael	Arnprior.
Kearney, Michael John		Legree, John	Dacre.
Kendrick, John		Legree, James L	Calabogie.
Kendrick, John L		Leigh, John Chas	Gravenhurst.
Kennedy, John W		Lloyd, Edward B	King.
Kelly, James F		Lavelle, Charles H	Gravenhurst.
Kauffman, Julias		Lyons, James	Canoe Lake.
Kennedy, Sylvester		Ledwood, Charles	Waltham Sta., Q.
Kernahan, George A	Barwick,	Levelle, Emrey	Uttawa.
Kehoe, Martin		Little, Theo	Waltham Sta., Q.
Kennedy, Daniel J	Spanish.	Lehman, Joseph	Ctrotton Ctattan
Leannoth, Francis	Amnuion	Lalare, Mark	Cooks Dow
Lee, James		Leach, George	Vormilian Dan
Lloyd, Alfred		Lou, Angus M	Snanich Mills
Lawrie, Frank A	Parry Sound	ila bene. Ambrose	IZ an ana
Latimer, Jas.	Frank's Bay	ILA Breen. Douglas	TZ am ama
Lemyre, Middey		LLavelle, Michael J	7077 - 3 70 1
Lutz, Jacob		HAVIELON, J. B	D
Luby, John E			
Law, Wm. J		Lalonde, Joseph Maxine	Link.
Lummis, Daniel	Glanmire.	Laderoute, Michael	Arnprior.
Lowe, W. C	Port Arthur.	Leroy, Levi H	Port Arthur.
Londry, S. C	Sault Ste. Marie.		
Lochnan, James	Ottawa.	Malloy, Mark	Baysville.
Link, Henry W	Ottawa.	Martin, Hugh	Sault Ste Marie
Ladarotte, John	Arnprior.	Miller, R. O	Gravenhurst.
Lochnan, John	Aylmer, Que.	Morrison, James	Toronto
Lozo, John	Trenton.	Murray, Frederick	Huntsville.
Loughrin, Lawrence	Pembroke.	Menzies, Archibald	Burk's Falls.
Linton, J. H	Parry Sound.	Manning, James	Trenton.
Ludgate James	Peterborough.	Martin, Philip	
Lee, Robert	Demondia.	Malone, Wm. Patrick	
Langford, Mark	Baysville.	Marsh, Esli Terrill	
Letherby, Edwin	Midiand.	Miller, John W	
Leahy, Francis M	Chapeau, Que.	Muchinbacker, Asa	
Langford, Henry	Baysville.	Morris, Geo. F	
Lessard, Philip	Kenora.	Murray, George, Jr	
Lovering, William James.		Maughan, Joseph	
Lane, Maurice		Margach, Wm. J	
Lenton, George	reterborough.	Murray, George, Sr	wanbaushene.

Name.	P. O. Address.	Name.	P. O. Address.
Manice, Wm	Peterborough.	(Mangan, John	Arnprior.
Murray, Wm	Kenora.	Mooney, Thomas	Kingston.
Morgan, Richard J	Kenora.	Mason, Robt. T	Rochesterville.
Magee, Thomas Arthur		Moore, Wm. John	
Murdoch, James	Cook's Mills.	Morrison, Donald	
Mulvahill, Wm	Arnprior.	Moore, Wm	Bobcaygeon.
Murphy, Arthur		Mutchenbacker, Herman	Rosseau Falls.
Mayhew, Jacob		Moore, Norman	
Molyneaux, George		Morley, John R	Kenora.
Milway, Joseph	Fort William	Mackay, J. A	
Mackie, Nathan	Port Arthur	Miller, Robt	
Milne, Archie	Arnprior.	Mackey, Levi Ralph Morley, Frank W	
Murray, James		Madden, F. M	
Moore, James A. E		Miller, Walter E.	
Merkley, William A		Murray, Robt.	
Murphy, Hugh R		Mariay, 1000th	Dorricano.
Murphy, W. J		McCaw, Joseph E	Tweed.
Murray, William	Markstay.	McLaren, Peter	Kenora.
McFarlane, Robert L	Warren.	McGregor, Colin F	Kenora.
Martin, Edgerton		McKenzie. Robert	Kenora.
Mathieson, Archie		McFadyen, A. J	Bracebridge.
Moore, Henry R		McCaulay, Thos. J	Goulais Bay.
Mickle, Chas S		McDonald, John C	
Mullen, James	Webbwood.	McKenzie, Alex E	Ansonia.
Morley, A. W	Winnipeg.	McIntyre, John	Arnprior.
Macdonald, James M	North Bay.	McDermott, Thos	
Money, Harry	Haileybury.	McDermott, Jas. E	
Mather, Allen	Keewatin.	McCrindle, Jas	
Menzies, Alexander	Sault Ste. Marie.	McGhie, Chas. S	
Munro, Peter P	Commanda.	McGenigal, John H	
Mason, Benjamin Monaghan, John B	westmeath.	McCart, Patrick	
Monaghan, M. J	Arnprior.	McGrath, Thos. B McCormick, James J	
Mulvihill, John	Arnprior.	McCarthy, Wm	
Moran, Andrew	Postingham O.	McAvoy, Owen	
Mulvihill, Michael	Amparior	McConnell, Lewis	
Mann, John	Manitowaning	McMullen, George	
Marrigan, Richard	Deseronto	McNab, Angus	
Monaghan, John Dorland.		McColgan, C. H	
Matheson, Wm		McCallum, Webster	
Munro, Alex. G		McCagherty, Robert E	Westmeath.
Murphy, Oliver A		McNab, Archie	
Mellor, Charles		McDonald, Malcolm	Spragge.
Millions, Harry	Gillies' Depot.	McIvor, J. A	Fort Frances.
MacDonell, R. D	Biscotasing.	McCulloch, M	
Milne, Fred	Trout Mills.	McDonagh, Rod	
Milne, William H., Jr	North Bay.	McManus, James	
Murphy, Dennis	Thessalon.	McKinley, J. H	
Mackie, Thomas	North Lake.	McPherson, Jas. S	
Miller, P. H	Blind River.	McKinley, Edward C McClelland, John	Doronto.
Munro, Philip	Braeside.	McFarlane, J. W	Cooks Box
Mangan, Patrick	Arnprior.	McDonald, Roderick	Pombroke
Marcil, Peter	Ottawa.	McCormack, Wm	Fombroke
Main, Samuel	Spanish Station.	McCreary, William	Arnnrior
Morley, Charles	Huntsville.	McCuaig, James C	Bryson.
Moore, David Henry	Peterborough.	McColman, Peter	North Bay
Murphy, John	Arnprior.	McLeod, James D	Gravenhurst.
Mathieson Daniel	Chelmsford.	McCrimmon, N. K	Blind River.
Milne, Wm.,	Ethel.	McCreary, James, Jr	Arnprior
Manage Obestes	Durle's Polls	MaDhaa Hugh	70 T 2 - A
Mangan. Charles Mooney, Lincoln	Duik S Falls.	McPhee, Hugh	Byng iniet.

	1	1	
Name.	P. O. Address.	Name.	P. O. Address.
McLachlin, J. A	Arnprior.	McNally, J. A	Desbarats.
Macpherson, John		McNab, Alexander	
McEachren, John A	Gravenhurst W.	McFarlane, Alexander	
McLeod, Dugald		McFarlane, J. D	
McClelland, R. H		McFarlane, Duncan	
McEvoy, Frank		McKendry, Wm. B	
McDermottt Peter		McPhee Hugh	
McIlroy, John		McPhee, John	
McNab, Robert J McFadden, James		McLachlin, Alexander	
McIntosh, James G		Mackey, Edward	
McInnis, Hector D		McEwan, Henry	
McKinnon, Malcolm	Bracebridge.	McDonald, Alfred	
McLean, Daniel	Bracebridge.	McGeary, John J	
McKinnon, Archie J	Bracebridge.	McDonald, Archibald W	Gilmour.
McKay, D. C	Baysville.	McGaw, John Gillen	
McDonald, James	Parry Sound.	McCauley, Barney	Trenton.
McPherson, Allan	Longford.	McDougall, James T	Klock's Mills.
McDonald, James P	French River.	McInenly, Thomas McBride, Archibald	Quebec, Que.
McFarlane, Jos. C McNabb, Alexander	Port Severn.	McFarlane, Robert L	Arnprior.
McGillivray, Archibald	Port Anthur	McGowan, Wm	Parry Sound
McGrane, Edward	Lindson	McLachlin, Norman	Arnerior
McLeod, Donald, Jr	Keewatin	McDonald, Laughlin	Pendleton
McDonald, Hector R	Thessalon	McIvor, William J	Colling' Inlet
McDougall, Duncan	Bracehridge	McKee, John P	Sturgeon Falls
McNabb, Alexander D	Warren	IMCGowan, Thomas	Parry Sound
McCormack, John C	Sudhury	IMcDermot, Patrick	South River
McNamara, John	Byng Inlet.	McKay, Angus	South River.
McGillivray, Duncan D	Algoma Mills.	McDonald, A. J	Longford.
McIntyre, Daniel A	Klock's Mills.	McInnis, Angus D McKendry, Alexander	Gravenhurst.
McNamara, Lewis McDonald, Sydney C	Klock's Mills.	McGuire, Timothy	Waubausnene.
McGurn, John J	Mattawa.	LWCGrath, John	Dotonhonough
McKeown, Jno. Joseph	Buckingnam, Qu.	MCWIHIams, Jno. Bannon.	Peterborough
McNeel, David	Soult Sta Manta	[McCagnerty, Patrick	Westmeath
McEwan, Andrew	Mh agail	McKendry, Daniel	Arnprior.
McCool Christopher L.	Chart	MacDonald, D. F	Parry Sound
McCollom, Donald	A 1	McManus, Thomas J	Renfrew.
MC170Well With	A	Macfarlane, David R	
mcConnachie, Roy Stewart	Huntsville.	McColgan Edward McKay, John	deal one again
		McKinnon, William	Emo.
McDonald, Alex. J McKay, D. A	Vermilion Bay.	McKittrick, Frank R. F	Kenora.
MCWILLAN, James	TT	McMichael, Charles	Kenora.
		McIlroy, Thomas Davis	North Seguin. Madoc.
McKay, George Donner	Dorgot	McDonald, Wm. Henry	Tropton
Mew manns, Maxwell		McGaw, wm. Thomas	Callondon
Theodore	Peterborough.	McMillan, L	Callender.
McLeod, John	Keewatin	ImeDermott, John L	Ontillo
McPherson, George	Keewatin.	McDonald, Chas. M	Pombroko
McDougall, John D	Kenora.	McPhee, Benjamin	Pembroke.
McGregor, Duncan	Burnstown.	McGee, John Edward	Parry Sound.
McLean, Peter W	Sand Foint.	Macfarlane, Mack	Arnprior.
McInnis D E	Sudbury.	MacCallum, Alexander	Braeside.
McInnis, D. E	Wanhanghana	McRae, Farquhar	Kenora.
McCollam, John	North Ray	MacCallum, Albert McGonigal, John	Arnbrior.
McManus, John C	Arnprior	McConachie, John	Arnprior.
McLean, John	Blind River	McKay, D. G	Kenora
McLeod, Norman		McDonald, James	Peterborough
McLean, James	Blind River.	McCulloch, John L	Lonsdale.
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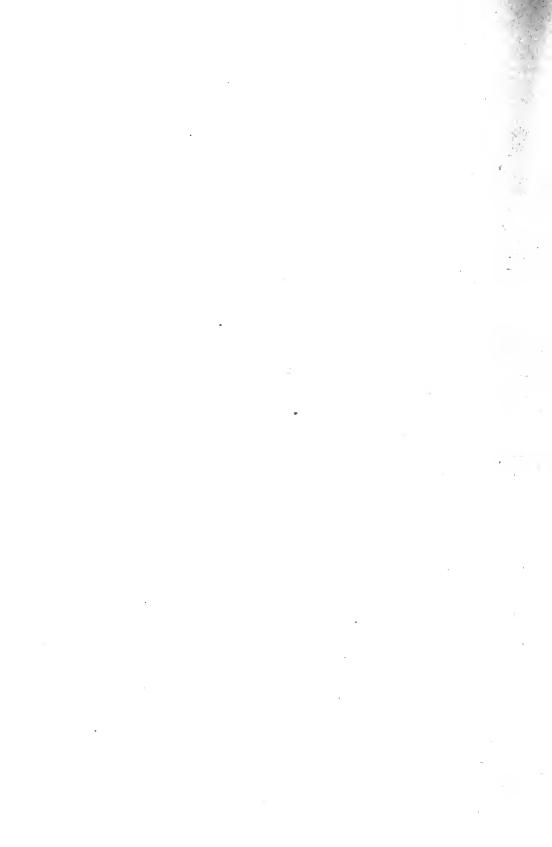
Name.	P. O. Address.	Name.	P. O. Address.
McConnell, James	Mine Centre	O'Neill, Mark	Renfrew
McIntyre, William John		Orrill, John	
McDonald, Allen	Rig Forks	O'Neill, Patrick	
McLay, Albert		Orde, Francis W	
McQuarrie, Daniel		O'Driscoll, Joseph	
McNaughton, Daniel		O'Gorman, Peter	Blind River.
McCagherty, William E		0 doid., 1 00010000000000000000000000000000000	Dilla itivei.
McDonald, John D		Pigott, John	Fitzroy Harbour.
McCagherty, Joseph T		Paul, Charles A	Sault Ste. Marie.
McAdam, Arch H		Patinson, Thos	Bracebridge.
McMurphy, Dugald, Jr		Price, A. E	Arnprior.
McCall, Alfred		Presley, J. F	Ashton.
McRitchie, William		Power, James	Bobcaygeon.
McRitchie, Malcolm		Patzel, Adolph	Arnprior.
McDonald, John Harold		Plaunt, William B	Eganville.
McAuley, William Davis		Plaunt, Joseph	Eganville.
McCallum, Thomas		Porter, Charles C	Longford.
McWhinney, Fred		Preston, R. E	Kenora.
McNairney, Hugh H	Sudhury	Petrie, Geo. A	Fergus.
McKelvie, William		Pomeroy, Peter	Trenton.
McGovern, Frank		Perry, Pringle K	Byng Inlet, N'th.
McCallum, Gordon	Fort Frances	Purcall, W. G	Ottawa.
McCallum, Henry	Fort Frances.	Purvis, John	Parry Sound.
McLaughlin, Russell	Spanish Mills	Porter, James	
McAdam, Miner S	Outo Ouo	Pearson, John James	
McDougall, David A	Nogtonville	Penney, Chas G	
McLeod, William A	Monitowoning	Pennock, James P	
McKee, D. A.	Walio	Purdy, John A	
McKay, Norman		Playfair, R. J	Blind River
Mercay, Morman	Fort Frances.	Paterson John	Wahnanitae
Nescott, George	Kenora.	Paterson, Alexander	Orillia.
Newton, Frank		Parke, James	
Newburn, Wm	Parry Sound	Parquette, Oliver	Webhwood
Niblett, James	Arnprior.	Palmateer, Sherman	Gravenhurgt
Niblett, Robert	Osceola.	Paget, George	Huntaville
Nevison, Herbert		Pounder, Joseph	Westmeath
Nicholson, John	Owen Sound	Pell, Richard D	Arnprior
Newall, John H	Parry Harbour	Perry. Frederick	Port Arthur
Nolan, John		Paget. Charles Edward	Novem
Newton, Charles W	Victoria Harbour.	Porter, Thos. Robt. Mark.	Dorget
Nent, Charles	Vermilion Bay.	[Pountney, E. J	Arnorion
Needham, John G		Pyburn, David J	Dorgot
Netterfield, David	John's Island	Purdy. Geo	Hintonham
Nault, James	77	i Playlair. Andrew win	Soult Cta Mand
radit, James	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pipe. Taylor	Hailovhunn
Oullette, Joseph P	Cutler.	Pipher, George E	Morrot
O'Neil Thomas	Bancroft.	l Pendee. David	Parry Cound
O'Neill, Daniel H. H	Arnprior.	Piper. A. J	Dlind Di
O'Leary, Patrick J	Orima.	Paget. Alfred H	Ahmio ITout
Oliver Charles R	Fesserton.	Powers, John J	Tront 3/211
Overend, George J.	Longford Mills.	Pigott, William D	Fitzrov Haubann
O'Brien, Andrew	Ottawa.	Potts, Cyril	North Lake
O'Brien, Frank G	Arnprior.	Pilkey, William	La Valles
Oliver, J. A	Fort William.		valice.
Owen, W. J	Wabigoon	Quinn, William	Peterhorough
O'Connor, John	Hintonburg	Quigley, Hugh	Penetano
Oliver, Darcy	Wahnanitae	Quirk, Thomas J	Petawawa
O'Connor, Wm	Noshonsing	Quance, Louis F	
O'Neil, James W	North Bay	equance, Louis F	Doilleuale.
CATULE BULLION TY	A. O.L. Day.	I	
O'Donnell Wm	Penetanguichana	IRobertson D	Kenora
O'Donnell, Wm Owens, Richard	Penetangulshene.	Robertson, D	

Name.	P. O. Address.	Name.	P. O. Address.
Riddell, Geo. Alexander	Rochesterville.	Ritchie, James A	Spragge.
Robertson, Lewis McLean.		Ross, George Joseph	Schrieber.
Robinson, Wm. F	Bobcavgeon.	Rowe Frank E	
Reamsbottom, Wm		Regmibal, J. Hector	
Richey, Evan		Reid, William T	
Randall, Lewis G	French River	Ross, Sidney	
Richardson, Chas. Marvyn			
Rochester, Daniel Baillie.		Smith, M. D	Fort William.
Riddell, James	Ottawa.	Scanlan, William	Enterprise.
Rice, Asa S	Hull, Que.	Sutherland, D. H	Gravenhurst.
Roberts, T. A	Huntsville.	Spanner, John	
Ross, Andrew	Longford Mills.	Shier, James D	Bracebridge.
Rose, Donald M	Kenora.	Spooner, W. R	Katrine.
Rawson, Charles Edward.		Simpson, Alfred E	Wakefield.
Ross, George		Souliere, John B	Ottawa.
Roberts, Percy T		Shields, James A	Carleton Place.
Ritchie, Wm. D	Little Current.	Spargo, George	Ottawa.
Ramsay, Robert	Arnprior.	Smyth, W. H	Baysville.
Ritchie, J. F	Arnprior.	Salmon, R. H	Byng Inlet North
Ritter, Samuel G		Salmon, Alexander C	
Rothera, Charles F		Stremer, A	Ottawa.
Ryan, Alfred		Shields, Frank A	Ogidakie.
Rogers, Fred	Sault Ste. Marie.	Stapleton, John J	Fort Francos
Reid, George William		Sloan, William H	
Robertson, John A	Kenora.	Smyth, Job E	Muskoka Milla
Robinson, Wm	Boocaygeon.	Seymour, Edward	
Reid, Joseph B	Ottorio	Shaw, Thomas B	
Ross, Walter M	Carloton Flore	Swanston, James	
Richards, Benedict	Ottown	Simpson, William	
Regan, John	Orillia	Sadler, Thomas	Lindsay.
Russel, Wm	Pembroko	Smith, Patrick Albert	Norman.
Ramsay, Charles	Sudbury	Snaith, William J	Mattawa.
Russell, Corsan L	Pembroko	Sinn, William F	Arnprior.
Richards, Henry	Dacre	Sheppard, Wm. Joseph	Waubaushe ne.
Ryan, Wm	Killaloe	Spears, Milton B	Barry's Bay.
Reid, John P	Spanish Mills	Stevenson, Arthur	Peterborough.
Ridley, Robert	New Liekoard	Stein, Paul	Sault Ste. Marie.
Riley, Charles W	Hutton House	Shaw, Alfred	Thessalon.
naymond, Morris T	Spanish Milla	Sequin, Napoleon	Spanish Station.
Rooney, Wm. H	Camphollford	Scrim, Robert	Arnprior.
Revell, J. U	Drydon	Sharp, James A	Sudbury.
Rankin, Anthony	Cacho Por	Shaneay, Harry S	Cook's Mills.
Ross, Angus	Orrvilla	Smith, Wm Stewart, Daniel	Ottawa.
Robinson, Albert E	Washago.	Sheehan, Michael H	Braeside.
Robinson, Edward	Washago.	Smith, Sydney H	waususnene.
Robinson, Thomas G.	Washago.	Stewart, James A	Bracebridge.
Raycroft, William T	Sarnia.	Sproule, Newton H	Cahambara
Roberts, Ivor M	Garden River.	Simmons, Alex	Port Arthur
Revell, Lionel Oliver	W. Gravenhurst.	Scott, Thomas	Parry Sound
Regan, Judd Patrick	Orillia.	Smith, Lawrence	W Saginaw Mich
Robins, Etna Rosedale Regan, John, Jr	Orillia.	onea, Stewart	Camphellford
Ryan, James	Orillia.	Sulivan, John	Sault Sta Maria
Rusk, Oscar W.	Cacha Da	Sinciair, Finlay	Sudbury
Robinson, Thos. Geo	Procedulari	Sniels, Henry F.	Cartior
ROOKSDY, WM	Camphallford	Smith, Gideon Ousley.	Rurk'a Folla
reameshoriom, Ront.	Ryng Inlot	Smith, John Wallis	Thadford
Lewis	Arnnrior	Smith, Henry G.	Arnnrior
Mudell, Horace A	Galatta	Story, John A.	Ottawa
Rowan, A. L		Sweezy, Benjamin Sheppard, Charles H	Maggarr
	~wait blc. Warie. I		

Name.	P. O. Address.	Name.	P. O. Address.
Circleia Armon D	Arpprior	Tuelon Louis A	Bont Enongie
Sinclair, Armon D	Ottowa	Tucker, Louis A	
Smith, Sidney E	Ranid River		P'rt'ge du F'rt, Q. Kenora.
Sheehan, Peter F	Loring (canc'l'd)	Thompson, Joseph H	
Sleeman, Geo	Rapid River.	Taylor, Edward A	
Sims, Wm. K	Sault Ste. Marie.	Talt, Ralph	
Skahill, Wm	Blind River.	Train, William	
Shaw, George		Turner, Garvin F	
Sarsfield, George Francis.	Sault. Ste. Marie.	Tilson, Joseph	Burk's Falls.
Standish, Wm. H		Tuffy, John	Cartier.
Simpson, Wm. A		Thorpe, Thomas	Pembroke.
Scollard, Wm		Taylor, Charles E	Gravenhurst.
Shuttleworth, Alma		Tench, Arthur	Hekkia.
Shanacy, Wm. J		Tulloch, William A	Burnetern
Seely, George		Taylor, Alex. M	P'rt'ge du F'rt. Q.
Stewart, Alex. W Soreny, Wm		Toner, J. A	
Schneder, Frederick	Cache Ray	Tooke, Frank	Rala
Smith, James D		Thorburn, Donald James	Thessalon.
Sullivan, James		Tetreault, Philias	Tomiko.
Scully, Cornelius	Whitney.	Tibbets, L. R	
Savoy, Eutrope	North Bay.	Tichborne, A. C	
Smith, Walter J	Campbellford.	,	
Seymour, John J	Whitefish.	Udy, Dean	French River.
Smith, Alex. R. C	Burk's Falls.	Urquhart, Elias	
Stewart, Richard M	Chelsea, Que.	Urquhart, Andrew	Barrie.
Souliere, John H	Canoe Lake.		
Smith, Abraim G	Quyon, Que.	Vigrass, Percy J	Dufferin Bridge.
Swallow, C. H	Day Mills.	Vincent, Joseph	Warren.
Strave, A. M.	Mine Centre.	Vollin, Samuel	Nosbonsing.
Stewart, John	Rainy River	Vannier, Nelson Joseph	Bobcaygeon.
Sullivan, George L	Kenora.	Vincent, James	F'esserton.
Short, James		Vincent, Henry T.	Wicewege
Short, Chas. J	T.	Vanderburg, Norman	
Smith, David H	G 31.	Valois, Armand Villiers, Claude	
St. Hillaire, George	1 A	Vanier, John	
Souliere, Joseph C	Cutler.	vanier, sonn	Datase Dec. Marie
Scott, J. C	Fort Frances.	White, Thomas S	Bracebridge.
Stewart, Frank E	Crozier.	White, A. Thomson	
Sanders, Edward	Barwick.	Watt, R. A.	
Spence, William	Arnprior.	Wilkins, Hughes	
Scott, Allan A		Wallace, T. William	Blind River.
Souliere, Max	Spanish Mills.	White, Joseph W	Bracebridge.
		Watson, William	
Taylor, Fred. L	FF17 . 3	Webb, George W	
Thomas, Griff J	Thessalon.	Wilcox, Thomas	Parry Sound.
Thomson, R. D.	Bunk's Flata	Wheeler, J. A. McL	Tamworth.
Tait, Thomas B	Gravenhurst	Widdifield, C. H	
Taylor, C. M	Longford Mills	Whitmore, Edgar Wright, L. B	Coult Ste Marie
Trussler, Gilbert	Trout Creek	Wright, L. B	Ottawa
Thompson, Geo. S	Lindsay.	Wilkinson, W	French River.
Thompson, Fred. A. H	Nosbonsing.	Waldie, John E	Victoria Harbour.
Thompson, Francis Hy	Nosbonsing.	Wigg, Thomas G	Thessalon.
Train A C	Rowan Mills.	Wall, Patrick B	Cheboygan, Mich.
Turgeon Geo	Cook's Mills.	Wells, John R	Little Current.
Thaver. Wm	Sault Ste. Marie.	Whiteside. John	Huntsville.
Thompson, Alexander W.,	Arnprior.	Watt. William	Peterborough.
Taylor, Thos. G	Gravenhurst.	Wilson, George	Lindsay.
Trowse, A	Arnprior.	White, Thomas	rarry Sound.

Name.	P. O. Address.	Name.	P. O. Address
Wood, William D	Sault Ste. Marie.	White, Alian	Pembroke.
Watts, John J	Fort Frances.	Warner, Franklin H	Fort Frances.
Webster, George F	Fort Frances.	Watts, George	
Wright, Percy	Fort Frances.	Wood, Thomas	Parry Sound.
Watts, William B	Fort Frances.	White, William	Peterborough.
Watson, William		Woods, A. L	Kenora.
Wagner, Fred		White, John B	Kippewa, Que.
Wainwright, Edward C		Whelan, Peter M	Renfrew.
Wilson, Wm. James		Wilson, David	Kearney.
Weston, Frank R		Weston, Cecil	Dorset.
White, James B	Manitowaning.	Wilkins, George E	Dorset
Warren, Robert M		Woodcock, Edward	Brownhill.
Wilson, George A	Balsam Hill.	Wilson, Fred	Callender.
Welch, Harold		Wilson, Alexander R	
Wilson, James A., Jr		Webster, Henry R	North Lake.
Woods, John R		Wallace, Fred. R	Port Arthur.
Wardell, Ernest C. S	Victoria Harbour.		
Woods, Joseph F	Roach's Point.		
Whaley, Thomas	Huntsville.	Younge, Harvey D	Fort Frances.
Webster, Wm. Alfred		Young, R. H	Fort Frances.
Wornsdorf, Fred. Gutlep .	Pembroke.	Yuili, John Albert	Braeside.
Warrell, Wm		Young, William	Severn Bridge.
Wims, Peter	Blessington.	Young, A. J	Cache Bay.
Wickware, Philip Almont.		Young, Samuel	Coldwater.
Wilson, Edward	Deseronto.	Young, Patrick P	Young's Point.
Whelan, P. J	McDougall.	Young, Francis G	Young's Point.
Whyte, John Thos. Goth		Yuill. Thomas	Arnprior.
Watterworth, J. A	Sault Ste. Marie.	Yuili, A. D	Braeside.
White, Wm. James		Young, C. T	Harvey.
Warrell, George	Powassan.		Arnprior.
Wells, George W		Yuill, Archibald	Bracebridge.
Wilson, Frederick Gould		Yuiil. William	Braeside.
Wallace, John Thomas		Young, Walter D	Whitefish.
Wilkins, George N		5,	
Wylie, Byron M		Total, 1,400.	

AUBREY WHITE,
Deputy Minister.



REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For Year Ending 31st October

1911

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

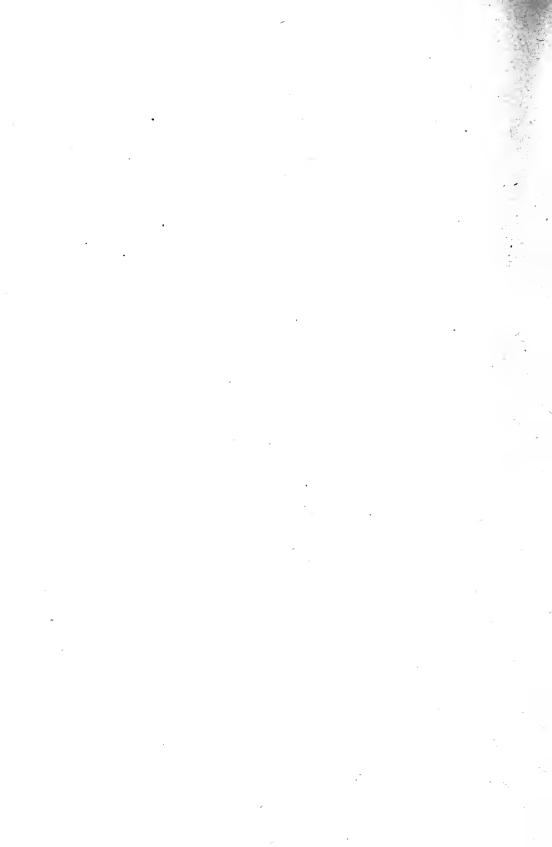


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Report of the Minister of Lands, Forests and Mines of the Province of Ontario

For the Year ending 31st October, 1911.

To His Honour THE HONOURABLE J. M. GIBSON,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

As required by law, I submit for the information of your Honour and the Legislative Assembly a report of the management of the Crown Lands of the Province for the year ending 31st October, 1911.

CLERGY LANDS.

The amount collected on account of sales of Clergy Lands was \$4,522.15. (See Appendix No. 3, page 7.)

COMMON SCHOOL LANDS.

The area of these lands sold during the year was .50 acres for \$25. The collection on account of these and former sales was \$6,281.24 (See Appendix No. 3, page 7.)

GRAMMAR SCHOOL LANDS.

The amount collected on account of sales of Grammar School Lands was \$200. (See Appendix No. 3, page 7.)

UNIVERSITY LANDS.

The area of these lands sold during the year was 5.626 acres for \$2,818.25. The collection on account of these and former sales was \$1,889.12. (See Appendix No. 3, page 7.)

CROWN LANDS.

There was sold for agricultural purposes during the year 118,573 acres for \$159,889.89. There was collected on account of these and former sales \$109,681.31. There was sold for mining purposes 27,924 acres for \$58,997.77. There was collected on account of these and former sales \$64,268.43.

There was leased for mining purposes 10,292 acres, for \$11,758.64. There was collected on account of mining leases \$25,797.14. There were 5,213 acres leased for other than mining purposes and collected on account of Crown Leases \$21,577.82. The total area of lands of the Crown disposed of during the year was 167,629.57 acres and the total collection on account of lands sold and leased was \$234,217.21. (See Appendix No. 3, page 7.)

FREE GRANTS.

During the year settlers evidenced an increased desire to take up free farms, there being nearly 200 more locations carried out than in the previous year. No less than 1.568 applicants were located for 224,042 acres. The Department is insisting upon a vigorous compliance with settlement regulations, and is continuing the practice of inspecting located lands to ascertain where there is a default in the conditions. The Department is also endeavouring to prevent lands that are unsuitable for farming being located merely for the purpose of getting the timber.

Part of the Township of Morgan in the Sudbury District and the Township of Melgund in the Kenora District have been opened for location. Locations and patents in these townships carry the mines and minerals, and in the case of Melgund the settler also gets the pine timber.

MILITARY GRANTS.

The total number of Military Certificates issued to date, under I. Edward VII., cap. 6, is 13,995.

Forty-three Location Certificates were issued this year and 237 new locations were made, making the total number of locations 7,732.

Twenty-one Certificates were surrendered to the Crown for \$50.00, making a total disposed of in this manner of 3,322.

The number of Certificates that have been applied in payment for Crown Lands is 688.

The number of locations cancelled for non-compliance with the regulations of settlement duties on lots located under assigned Military Certificates was nine-

The total number therefore that are shown to have been redeemed is 11,742, leaving as still outstanding 2,257.

Patents were issued during the year for 674, making a total of 4,563 issued to the end of the year.

THE MINERAL INDUSTRY.

The aggregate value of the mineral products of Ontario increases year by year. In 1911 the output of the mines and metalliferous works of the Province amounted in value to about 42 millions of dollars. Of this, metallic products contributed about 29 millions and non-metallic products 13 millions.

In their yield of silver the mines of Cobalt provide one-seventh of the world's output, the production for 1911 being thirty-one and a half million ounces. A feature of the camp is the development of concentration and refining processes on the spot. Most of the high-grade ore is now treated within the bounds of the Province, and the mines are finding it increasingly profitable to concentrate their lower-grade material, thus escaping the payment of freight charges on much waste rock. A number of the companies are now shipping merchantable bars direct to London. South Lorrain and Gowganda are also producing silver.

The development of the gold mines at Porcupine was not a little impeded by the disastrous fires which swept that neighborhood in the summer of 1911, and which caused so lamentable a loss of human life. The two largest and most advanced plants, those at the Dome and Hollinger mines, were completely destroyed, but are both being re-built. Several other mining properties suffered severely. As a result, the actual gold production at Porcupine was small. Early

in 1912, however, it is expected that the two mines mentioned as well as some others will be yielding bullion, and it may confidently be expected that Porcupine will make an appreciable contribution to the gold supply of the Dominion. The Temiskaming and Northern Ontario branch line from Iroquois Falls was approaching completion at the end of the year. Power for operating the mines is being obtained from Sandy Falls on the Mattagami River, in the Township of Mountjoy, and Wawaitin Falls farther up the same river are also undergoing development. Promising finds of gold bearing quartz have been made at West Shining Tree Lake, in the Temagami Forest Reserve.

The output of nickel and copper from the mines of the Sudbury District was somewhat less than in 1910, the yield of nickel being 17,049 tons, and of copper 8,966 tons, the whole having a value in the form of matte of about 5 million dollars. The Canadian Copper Company have increased the smelting capacity of their plant, the ores for which are being taken from the Creighton, Crean Hill and No. 2 mines. The Mond Nickel Company's new smelting works at Coniston, east of Sudbury, were greatly advanced during the year. On the northern range the Dominion Nickel Copper Company did a good deal of drilling and testing.

A notable addition to the iron ore resources of the Province has been made at Magpie in the Michipicoten District, where a large deposit of sideritic ore is being opened up by the Lake Superior Corporation. It is proposed to roast the ore for the removal of sulphur and carbonic acid previous to smelting. The Helen mine in the same district has been systematically worked, and at Moose Mountain, north of Sudbury, a plant for concentrating the magnetic ores of that mine is being installed.

It is evident that the mining industry will prove of great service in the settlement of population in the northern parts of the Province. As exploration is extended, the pre-Cambrian formations are revealing their riches of metallic ores—gold, silver, nickel, copper, iron—and the mining camps which have already come into existence and which are bound to spring up in the future will afford the very best market for all sorts of farm products. Now that railways are rendering Northern Ontario more accessible to prospectors, lumbermen and farmers, the natural wealth of the country, hitherto lying dormant, is being more easily and rapidly developed.

Collections.

The total collections of the Department from all sources for the year were \$2,710,242.68. Of this amount \$64,268.43 was derived from mining lands; \$285,913.26 from royalties; \$1.711,438.87 from woods and forests; \$941,709.28 from supplementary revenue; \$78,800.60 from mining licenses and \$126,676.59 from recording fees. (See Appendix No. 4, page 8.)

DISBURSEMENTS.

The gross expenditure of the Department for all services during the year was \$672,655.48. The principal services were: Agents' salaries and disbursements \$57,039.71; Forest ranging \$106,714.17; Fire ranging \$110,111.90; Forest reserves \$80,588.90; Mines and mining \$22,822.62; Explorations and investigations \$12,213.30; Mining Recorders \$32,804.37; Veterans' commutation \$1,050.00; Surveys \$167,428.64; Refunds \$20,546.54; Parks \$20,685.25; Contingencies \$20,-898.67. (See Appendices Nos. 6 and 7, pages 10 to 32.)

WOODS AND FORESTS.

The revenue accrual under this head for the year ending the 31st of October last was \$2,151,258.14, which is \$315,393.82 in excess of the revenue accrual for the previous year.

The increased accrual is caused by the coming in force this year of the regulation increasing the timber dues on old limits. The dues on sawlogs have been advanced by 50c. per thousand feet board measure, and on square timber by \$25 per thousand feet cubic. The ground rent was increased last year from \$3 to \$5, and the transfer bonus was also increased from \$3 to \$5 per mile.

The revenue collected during the year was \$1,711,436.87, being \$123,543.84 less than that of the previous year. The decrease in revenue was caused by lumbermen failing to pay in before the 31st of October, the end of our fiscal

year, a number of them finding it impossible to pay at that date.

The cut of pine sawlogs and boom timber was 29,000,000 feet board measure less than that of last year. There was also a small decrease in the quantity of other kinds of timber cut. The cut of pulpwood was 9,000 cords less than that of 1910. There was an increase of 467,171 railway ties over the previous year, and a small increase in the quantity of square timber cut. Under the system of culling and measurement in force with respect to recent timber sales the Crown appoints and pays the men who measure, which has caused an increased expenditure under the head of forest ranging. Half of the expense, however, is refundable by the licensees whose timber is measured under this system.

There were no timber sales of any consequence held during the year. A few areas which had been injured by fire were offered for sale by tender so as to obtain the value of the timber for the public.

FIRE RANGING.

The terrible forest fires that occurred in the Porcupine and Cochrane districts during the past year are still fresh in the public mind. Great destruction of timber took place and a number of lives were lost. The Department has made every effort to ascertain the cause of these fires and locate the responsibility for them, but it has been impossible to fix the responsibility upon any one in particular. The circumstances were such as to render certain the occurrence of terrible forest fires if any one even dropped a lighted match on the ground. Those people who were building small houses used such timber as they required, deaving the tops and limbs lying on the ground. The same thing happened with respect to the cutting of trees for fuel. When mining is being carried on extensively large numbers of trees are cut for buildings, fuel and other purposes. Where villages or towns spring up suddenly the same thing occurs on a more extensive scale, until the whole neighborhood is carpeted with limbs and brush, and as Jack pine and Spruce are the principal timbers in that country, and the limbs and needles of the trees are full of resin and highly inflammable, when the summer comes the sun dries them up and they will ignite easily and burn fiercely. This was the state of affairs that existed in the regions of Porcupine and Cochrane last summer when the fires occurred. The fires extended into the towns and when the buildings became ignited it was impossible to save them, surrounded as they were by a sea of fire.

The prevention of similar catastrophes will only be secured by those who cut down the trees for any purpose, piling the brush and debris as they cut

and burn it as occasion warrants. The Town of Porcupine was completely destroyed and many extensive mining plants were wiped out, and there was a great loss of life. A similar tragedy overtook the Town of Cochrane, where the loss of life was not so serious, but the town was almost destroyed. These fires were practically the only forest fires of any moment occurring last year. Naturally a great deal of sympathy for these unfortunate people was aroused and large sums of money were subscribed to relieve the necessities of those who lost their all, and were left bare to the wind. Every effort to give them a start again was made. Humanly speaking, everything was done promptly and generously by a sympathetic public. These two towns have risen from their ashes and are again becoming active business centres, but the loss of life was irremediable and deplorable.

The timber damaged consisted of Jack pine and Spruce, there being no

Red or White pine of any moment in that locality.

FOREST RESERVES.

In all the forest reserves adequate numbers of fire rangers were put on duty, and the utmost care exercised to prevent the occurrence or spread of forest fires.

The Temagami Forest Reserve has an area of about 6,000 miles; the Mississaga of about 3,000; the Nepigon, 7,300; the Quetico, 1,560; the Eastern, 100, and the Sibley 70, making a total of about 18,030 miles set apart as forest reserves for the conservation and protection of the timber therein.

There is also the National Park known as Algonquin Park, with an area of 2,060 miles, and Rondeau Park with 8 square miles. It is gratifying to be able to state that no fires occurred in these reserves or parks, which is in a large measure attributable to the close supervision that is kept during the summer months.

RAILWAYS.

Along the lines of railways penetrating the forest careful supervision by forest rangers was exercised. The Transcontinental extending from one end of the Province to the other, through a dense Spruce forest, was largely in the building stage. Here a large staff of fire rangers under the supervision of careful chiefs was placed, and as a consequence no forest fires of any moment took place. On the Temiskaming and Northern Ontario, the Canadian Pacific, the Canadian Northern, the Algoma Central and the Thunder Bay Branch of the Grand Trunk Pacific, staffs of fire rangers were on duty under capable superintendents, and no fires occurred on any of these lines or adjacent to them, which is an evidence that care was exercised by the rangers, and this, together with the active sympathy and support of the managements and the employees of the railways, brought about the good results which obtained.

GENERAL.

The number of rangers on duty in forest reserves was 190; on railways, 171; on Crown Lands, 91, or a total of 452 fire rangers employed by the Crown.

The cost of this service was \$190,700.80. There was on licensed lands a staff of 431 rangers, who were paid by the licensees. In addition there were about 15 supervising rangers, or a total ranging staff of 898.

The Canadian Northern Railway is now entering upon the building of its Transcontinental line through the Province of Ontario. This line runs about midway between the National Transcontinental Railway and the Canadian Pacific.

The Algoma Central is also building its railway extending north from the junction with the Canadian Pacific at Hobon to the junction with the National Transcontinental at Hearst, and an additional staff of fire rangers will have to be placed on these lines during the coming summer—probably an additional 200 men.

The expenditure on account of fire ranging in the Province has been a large one, but the results have justified the expenditure.

CULLER'S EXAMINATIONS.

Culler's Examinations were held during the year at North Bay, Kenora, Fort Frances and Port Arthur. Forty-seven candidates were successful at these examinations and were granted certificates authorizing them to act as cullers.

(For list of cullers see Appendix No. 46, page 103.)

CROWN SURVEYS.

The following Crown surveys have been undertaken this year.

Instructions for sub-division of an addition to the Township of Lyon, east of Port Arthur, and part of a township along the Grand Trunk Pacific Railway north-west of Fort William, in the District of Thunder Bay, were issued.

Instructions were also issued for the sub-division of an addition to the Town-

ship of Zealand, near Wabigoon, in the District of Kenora.

Instructions were also issued for a survey of a tract of land into lots near Mack Station, on the Grand Trunk Pacific Railway, in the District of Thunder

Instructions were also issued for the continuation of the survey of islands in

Georgian Bay, which survey was uncompleted last season.

Instructions were also issued for the survey of islands in the Lake of the Woods, of islands in the Winnipeg River, Sand and Gun Lakes in the District of Kenora, and in Rainy Lake in the District of Rainy River; also for the survey of islands in Sesekinika Lake on the line of the Temiskaming and Northern-Ontario Railway, north of Swastika, in the District of Nipissing.

Instructions were also issued for a traverse of the Mattagami River from the Transcontinental Railway north to its junction with the Missinaibi River; also for the survey of the Ground Hog and Kapuskasing Rivers north of the Transcontinental Railway in the District of Sudbury, including all water powers therein

Instructions were issued for a number of base and meridian lines in the

Districts of Sudbury and Nipissing.

Instructions were also issued for the survey of outlines of townships in the Districts of Sudbury, Nipissing and the Temagami Forest Reserve.

One hundred and twenty-seven miles of base and meridian lines were run in the District of Sudbury through the unsurveyed section of said district along the Metagami River, north of the Transcontinental Railway.

Instructions were also issued for the survey of three Town Plots on the Transcontinental Railway, at Low Bush River, Mattagami, Mattawishguia (or Hearst), in the Districts of Nipissing, Sudbury and Algoma, respectively, and for the Village Plot of Waldhof, on the Canadian Pacific in the District of Kenora.

A survey of the water ways between Biscotasing Lake and Fort Mattagami

was performed.

Several surveys of water powers and other minor surveys have been performed.

The reports of the Surveyors so far received and examined will be found in Appendices 18 to 43 inclusive, pages 47 to 97 inclusive.

MUNICIPAL SURVEYS.

On the petition of the Municipal Council of the Township of Nepean, instructions were issued to survey the original road allowance between lot 30, concession 2, Ottawa front, and lots lettered J. K. L. M. and N. concession A. Rideau front, in the Township of Nepean. Also on the petition of the Municipal Council of the Township of Williamsburg, instructions were issued to survey the road allowance between the 7th and 8th concessions of the Township of Williamsburg, from the east limit of lot 25, or the nearest undisputed monument to the west limit of the township. Also on the petition of the Municipal Council of Elmsley North, instructions were issued to survey the original road allowance between the 6th and 7th concessions from lot 22 to lot 30 inclusive, and to define the road allowance by permanent stone or iron monuments on each side thereof.

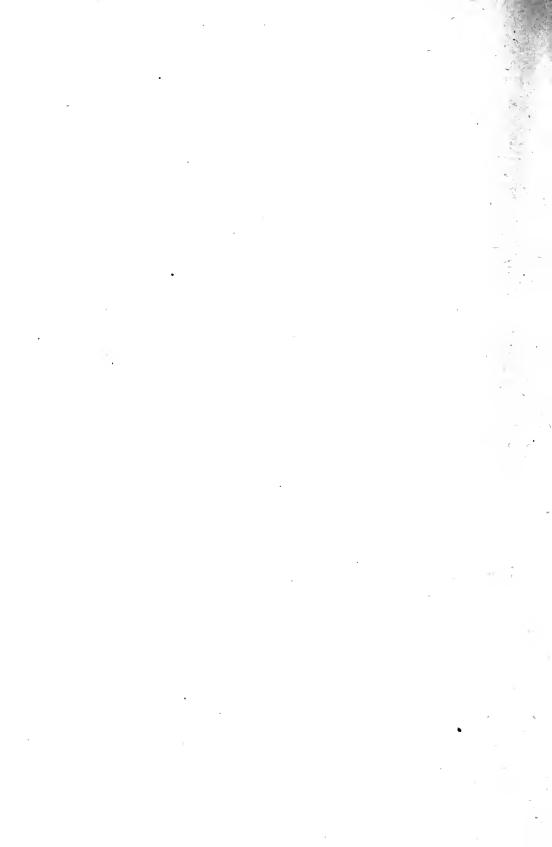
The following municipal surveys have been confirmed under the provisions of the Revised Statutes of Ontario 1897, chapter 181, sections 14 and 15, such surveys being final and conclusive: Part of the concession line between concessions 4 and 5, in the Township of Williamsburg from the west side of lot No. 9 to the east boundary of the township, and to define the road allowance between the said concessions with stone or iron monuments. Also the road allowance along the west bank of the Otonabee River, from Wolfe Street to Hunter Street, in the Town of Peterborough, and to define the western limit of said road allowance by stone or iron monuments. Also the concession road allowance between the 8th and 9th concessions of the Township of Hinchinbrooke from lot 12, south to lot 8, and to define the same by permanent boundaries. Also the survey of the town line between the Townships of Nepean and North Gower, and to define the same by permanent monuments.

MINING AND OTHER SURVEYS.

The Mining Act of Ontario requires that applicants to purchase or lease mining lands in unsurveyed territory shall file in the Department surveyor's plans (in triplicate) of the proposed mining claims with field notes and description by metes and bounds, before any sale or lease can be carried out, and under Orders-in-Council, dated February 26th, 1906, 2nd October, 1907, 7th November, 1907, applicants to purchase islands, or locations for pleasure and summer resorts or for agricultural purposes in unsurveyed territory, are required to file surveyor's plans (in triplicate) of their islands or locations as the case may be, with field notes and descriptions by metes and bounds, together with the necessary affidavits as to there being no adverse claim by occupation or improvement, etc.

Under the above Act, Orders-in-Council and Regulations in the Districts of Parry Sound, Nipissing, Sudbury, Algoma, Thunder Bay, Rainy River and Kenora, an area of 22,448.75 acres has been sold and patented during the year, for which the sum of \$83,518.60 has been received, and an area of 11,138.12 acres has been leased for the sum of \$12,699.24 as the first year's rental.

W. H. HEARST, Minister.



APPENDICES

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1911.

. Remarks.	Resigned October 11, 1911.		Resigned August 31st, 1911. Resigned March 31, 1911.	
Salary per annum.	\$ c 6,000 00 6,000 00 4,000 00 2,000 00 1,800 00 700 00 550 00	2,150 00 1,550 00 1,200 00 1,200 00 1,000 00 950 00 725 00 700 00 655 00	1,800 00 1,000 00 625 00 650 00	2,600 00 2,400 00 2,500 00 1,250 00 1,150 00 1,105 00 1,000 00 1,000 00
When appointed.	1905, May 13 1882, Jan. 1 1872, Feb. 1 1889, Reb. 26 1889, May 1 1905, Jan. 1	1872, May 1 1903, March 6 1894, Feb. 5 1903, Jan. 1 1909, March 13 1909, March 24 1896, Oct. 23 1907, Jan. 16	1900, March 2 1904, Jan. 13 1909, March 24 1904, Nov. 9	1886, Jan. 30 1892, Sept. 1 1909, May 1 1872, May 5 1897, Sept. 27 1904, Oct. 19 1904, Jan. 13 1911, March 3
Designation.	Minister do Deputy Minister Law Clerk Minister's Secretary Secretary to Department Stenographer Clerk and Stenographer	Chief Clerk do do do do do do Stenographer	Chief Clerk Clerk do stenographer	Director of Surveys Surveyor and Draughtsman Ass't Surveyor & Draughtsman Clerk Draughtsman do Draughtsman do do
Name.	Hon. F. Cochrane Hon. W. H. Hearst Aubrey White Geo. Kennedy E. S. Williamson Janet Garvie James Farrington	J. J. Murphy Walter C. Cain W. R. Ledger Selby Draper S. A. Platt F. Lucas F. Samuels May Bengough Jean C. Oram Nan McQueen	R. H. Browne R. T. Winter E. M. Browne E. F. O'Neil	G. B. Kirkpatrick J. F. Whitson L. V. Rorke W. F. Lewis W. F. Lewis E. M. Javis J. B. Proctor H. Treeby John Work F. E. Blanchet
Branch.		Sales and Free Grants	Military Grants. $\left\langle \right.$	Surveys and Patents

Appendix No. 1.—Continued.

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THE STATE OF THE S	Remarks.	
900 Summer	Salary per annum.	\$ C. 1,000 00 1,000 00 1,000 00 1,000 00 00 850 00 725 00 675 00 675 00 800 00 800 00 800 00 800 00 800 00 800 00
	When appointed.	1907, March 13 1908, April 8 1908, April 8 1901, March 13 1907, March 14 1909, March 24 1906, May 16 1907, March 13 1909, March 13
	Designation.	Clerk clerk do do do do Stenographer do do do Messenger
	Name.	R. A. Sinclair W. Lemoine A. Burritt A. Barr C. W. St. John C. W. St. John Ethel Craig Flossie McDougall J. L. McNaughton H. Brophy
	Branch.	Bureau of Mines.

D. GEO. ROSS,
Accountant.

AUBREY WHITE,
Deputy Minister Lands and Forests.

Appendix No. 2

List of Land Agents and Homestead Inspectors for the year ending October 31st, 1911.

Remarks,	Died December 6th, 1910. Resigned January 31st 1911 Resigned April 25th, 1911.	Resigned July 8th, 1911.
Salary per annum.	1,200 00 00 00 00 00 00 00 00 00 00 00 00	26000 26000 26000 26000 26000 26000 26000 26000 26000 26000 26000 26000 26000 26000
Date of appointment.	1907, Oct. 1. 1906, Nov. 23 1905, Oct. 20 1905, July 28 1906, July 28 1906, July 3. 1905, Nov. 15 1905, Nov. 15 1908, Nov. 19 1911, April 27 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8 1909, Jan. 8	May Nov. Nov. July July July July July Sept. Sept. Sept.
District or county.	Part of Victoria Homestead Inspector Part of Frontenac and Addington. Homestead Inspector and Crown Lands Agent Part of District of Sudbury do do Algoma Homestead Inspector Part of District of Rainy River do do Rainy River Homestead Inspector Part of District of Nipissing Homestead Inspector Part of District of Nipissing Part of District of Nipissing Part of District of Nipissing Part of County of Peterboro.	Te siste of the contract of th
Post office address.	Minden Fort Frances Denbigh Bracebridge Massey Thessalon Sundridge Stratton Station Cochrane Stratton Station New Liskeard Matheson Sault Ste. Marie Gochrane Apsley	Magnetawan New Liskeard Chelmsford Apsley Fort Frances. Murillo Emsdale Port Arthur Warren Blezard Valley Sudbury Emo North Bay Sturgeon Falls
Name,	Baker, R. H. Barr, James Both, Charles Brown, J. B Byers, R. J Buchanan, T. Burnes, C. W Campbell, W Campbell, W Chester, T. Child, F. A. Dean, Thomas Dempsay, S. J. Esastland, T. G.	Freeborn, Dr. J. S. Grills, J. J. Groulx, R. J

Appendix No. 2.—Continued.

1911.—Continued.
31st,
October
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year
the
for
Inspectors
Homestead
and
Agents
Land
of
List

Remarks.	per day while employed. Also Mining Recorder. Resigned March 21st, 1911.	WHITE, Deputy Minister Lands and Forests.
Salary per annum.	\$500 00 \$500 AUBREY WHITE, Deputy Min	
Date of appointment,	1905, July 12 1906, May 7 1906, May 7 1909, March 1 1909, June 18 1910, June 30 1905, Sept. 21 1905, May 31 1905, July 3 1905, July 14 1905, July 14 1905, July 14 1906, April 7	AUBRE
District or county.	Part of Renfrew do District of Rainy River Homestead Inspector. Part of District of Algoma. Homestead Inspector. Part of District of Nipissing Part of Hastings. do Rainy River. do Renfrew. do Renfrew. do District of Sudbury do St. Joseph Island Homestead Inspector.	
Post office address.	Wilno Dryden Sturgeon Falls. Sault Ste. Marle. Kenora Mattawa L'Amable Kinmount Pembroke Warren Marksville New Liskeard Englehart	SS Accountant.
Name.	Prince, Adam Pronger, R. H. Quenneylle, I. Rothwell, B. J. Smith, James Small, Robert Sprait, W. L. Wilson, James Warren, D. B. Wrykburne, W. E. ' Whybourne, W. E. ' Watson, T. P.	D. GEO. ROSS Accou

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections for the year ending October 31st, 1911.

Service.	Acres sold and leased.	Amount of sales and leases.	Collection on sales and leases.		
Crown Lands:		\$ c.	\$ c.		
Agricultural	118,573.04	159,889 89	109,681 31		
Mining	27,924.08	58,997 77	64,268 43		
Clergy Lands			4,522 15		
Common School Lands	.50	25 00	6,281 24		
Grammar School Lands			200 00		
University Lands	5,626.90	2,818 25	1,889 12		
Leases:					
Mining	10,292.05	11,758 64	25,797 14		
Crown	5,213	589 00	21,577 82		
	167,629.57	\$234,078 55	\$234,217 21		

D. GEO. ROSS. Accountant.

AUBREY WHITE. Deputy Minister Lands and Forests.

Appendix No. 4.
Statement of Revenue of the Department of Lands, Forests and Mines for the year ending October 31st, 1911.

Agricultural 70,945 86 38,735 45 109,681 31	Service.	\$	c.	\$	c.	\$	c.
Agricultural 70,945 86 38,735 45 109,681 31 Mining 64,268 43 173,949 74 109,681 31 64,268 43 173,949 74 173,94	LAND COLLECTIONS.						
Townsites	Crown Lands:	70.045	00				
Mining		38.735	45				
Clergy Lands				109,681	31		
Clergy Lands	Mining			64,268	43		
Common School Lands				173,949	74		
Common School Lands	Clongy I ands	4 522	15				
University Lands	Common School Lands					-	
Rent:	Grammar School Lands	200	00				
Mining Leases	University Lands	1,889	12	12 892	51		
Crown Leases	Rent:			22,002	- 01		
Miners' Licenses 78,800 60 6,291 38		25,797	14				
Permits		21,011		47,374	96		
Recording Fees 126,676 59 211,768 57 285,913 26 348 73 286,261 99 286	Miners' Licenses	78,800	60				
Royalties	Recording Fees	126,676	59				
Provincial Mines 348 73 286,261 99				211,768	57		
Supplementary Revenue:						~	
Acreage Tax	Trovincial Milles	940		286,261	99		
Profit Tax 176,314 23 Gas Tax 18,576 37 Woods And Forests. 209,461 51 Bonus 426,718 71 Fimber Dues 1,173,283 85 Ground Rent 104,325 96 Fransfer Fees 7,110 35 Provincial Assay Fees 1,362 37 Casual Fees 791 01 Calgonquin Park 5,415 92 Algonquin Park 357 80 Forest Reserves 1,309 00 Refunds 9,818 89 Fire Ranging 9,818 89 Surveys 3,598 63 Agents' Salaries 310 00 Contingencies 150 00 Explorations and Investigations 12 00 Bureau of Mines 47,570 45	Supplementary Revenue:	14 550					
Gas Tax		176 314	23				
Woods and Forests. 209,461 51 941,709;28		18,576	37			,	
Algonquin Park Refunds				209,461	51	0.44 500	
Timber Dues	WOODS AND FORESTS.					941,70	228
Fransfer Fees 7,110 35 Provincial Assay Fees 1,362 37 Casual Fees 791 01 Cullers' Fees 288 00 Algonquin Park 5,415 92 Rondeau Park 357 80 Forest Reserves 1,309 00 REFUNDS. 7,082 72 Wood Ranging 9,818 89 Surveys 35,98 63 Agents' Salaries 310 00 Contingencies 150 00 Explorations and Investigations 12 00 Bureau of Mines 47,570 48			[426,718	71		
Fransfer Fees 7,110 35 Provincial Assay Fees 1,362 37 Casual Fees 791 01 Cullers' Fees 288 00 Algonquin Park 5,415 92 Rondeau Park 357 80 Forest Reserves 1,309 00 REFUNDS. 7,082 72 Wood Ranging 9,818 89 Surveys 35,98 63 Agents' Salaries 310 00 Contingencies 150 00 Explorations and Investigations 12 00 Bureau of Mines 47,570 48				1,173,283	85		
1,362 37 791 01 288 00 2,441 38 701 701 01				7.110	90 35		
Casual Fees 791 01 288 00 Cullers' Fees 288 00 Algonquin Park 5,415 92 357 80 1,309 00 Forest Reserves 1,309 00 REFUNDS. 7,082 72 Wood Ranging 9,818 89 63 35,679 66 3598 63 Agents' Salaries 310 00 00 00 Contingencies 150 00 00 00 00 Explorations and Investigations 12 00 00 00 Bureau of Mines 47,570 48 00			٠.	7,110	_	1,711,43	8 87
Pullers' Fees 288 00 Algonquin Park 5,415 92 Rondeau Park 357 80 Forest Reserves 1,309 00 REFUNDS. 7,082 72 Wood Ranging 9,818 89 Surveys 35,679 66 Agents' Salaries 310 00 Contingencies 150 00 Explorations and Investigations 12 00 Bureau of Mines 47,570 48							
Algonquin Park							
Refunds 357 80 1,309 00 7,082 72 9,524 10			-	2,441	38		
Torest Reserves							-
Refunds 9,524 10	Forest Reserves						
REFUNDS. 9,818 89	•		-	7,082	72		. 10
Fire Ranging 33,679 66 Surveys 3,598 63 Agents' Salaries 310 00 Contingencies 150 00 Explorations and Investigations 12 00 Bureau of Mines 1 25 47,570 48	REFUNDS.					9,524	10
Fire Ranging 33,679 66 Surveys 3,598 63 Agents' Salaries 310 00 Contingencies 150 00 Explorations and Investigations 12 00 Bureau of Mines 1 25 47,570 48	Wood Panging			0.010	90	-	
Surveys 3,598 63 Agents' Salaries 310 00 Contingencies 150 00 Explorations and Investigations 12 00 Bureau of Mines 1 25 47,570 48							
Agents' Salaries	Surveys			3,598	63		
Explorations and Investigations				310	00		
Bureau of Mines			•••				
47,570 48							
\$2 710 242 68			-			47,570	43
						\$2,710,242	68

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year ending October 31st, 1911, which are considered as Special Funds.

Service.	\$	c.	\$	c.
		- h		
Clergy Lands.				
Principal	2,628 1,89		4 :	522 15
			+,	10
Common School Lands.				
Principal Interest	2,39° 3,88	7 08 4 16		
			6,2	281 24
Grammar School Lands.				
Principal Interest		9 00		
•	-			200 00
University Lands.				
Principal. Interest	1,73	1 57 7 55		
	15		1,8	889 12
			\$12.8	392 51

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines for the year ending October 31st, 1911.

Service.	\$ c.	\$ c	\$ c.
Agents' Salaries and Disbursements.			
Land, \$14,790.20.			
Baker, R. H. Disbursements	350 00 4 57	254.57	
Both, C	100 00 23 65	354 57	
Brown, James B Disbursements	900 00 132 60	123 65	
Buchanan, Thomas Byers, R. J.	500 00	1,032 60 300 00	- 1
Disbursements	10 64 125 00 18 45	510 64	
Disbursements		143 45	
Disbursements	210 95	63 51	
Disbursements	20 20	231 15	
Disbursements	13 85 500 00	255 30	
Disbursements Dempsay, S. J	32 95 375 00 12 80	532 95	
Disbursements			
Hales, W. Ellis, H. J. Freeborn, J. S	500 00		•
Disbursements	13 50 500 00	513 50	
Disbursements	500 00	568 84 300 00	
Disbursements	343 75	506 74	
Disbursements Langlois, E. Lemieux, J. A. McFayden, A.		383 75 276 70 400 00	
Disbursements	77 58	577 58	
Disburgements	111 90	611 90	
Carried forward		8,849 48	

Service.	\$	c.	\$ c.	\$ C
Brought forward			8,849 48	
AGENTS' SALARIES AND DISBURSEMENTS-Continued.				
Land.—Continued.				
Parsons, W. J		00 50		
Philion, J. A Disbursements	500 17	00 29	512 50	
Powell, F. R	500 14	00 00	517 29	
Prince, A	500 22	00 50	514 00 522 50	
Pronger, R. H	400 31	00 00	431 00	
Rothwell, B. J	500 4	00 60	300 00	
Spry, W. L	400 260		504 60 660 50	
Pait, J. R. Warren, D. B. Disbursements	300 3	 00 00	500 00	
Whybourne, W. E	250 6	00 03	303 00	
Wilson, J	150 9	00 00	256 03	
Woollings, Jos Disbursements	500 37	00 00	159 00	
Wright, E. A	• • • • • •		537 00 223 30	
Homestead Inspectors, \$10.010.44.				
Barr, James Disbursements	1,200 911		2,111 76	
Burnes, C. W	900 683		1,583 65	
Chester, T	1,200 569		1,769 43	
Dean, T	600 32	00 85	632 85	
Groulx, R. J. Hughes, Thomas Disbursements	600 355		600 00	
	~		955 25	

Brought forward	\$	c.	\$ 22,443	c.	\$	c.
AGENTS' SALARIES AND DISBURSEMENTS—Continued.			22,443	14		
				14		
Homestead Inspectors.—Concluded.						
· ·					,	
Quenneville, I	600 99	00	600	00		•
Watson, T. P	912 746		699 1,658			
Timber, \$28,071.37.			1,000	30		
Christic W D	000			- 1		
Christie, W. P	,600 441	22	2 041	22		
Hawkins, S. J	,430		2,041	22		
Disbursements	453	50	1,853	36		1
Henderson, C	,766 530					
Johnson, S. M	600	00	2,296	54		
Disbursements	,600 318		1,918	10		
McDonald, H 1	, 400	00	1,310	45		
Disbursements	501	00	1 001			
McDougall, J. T	,600	00	1,901	00		
Disbursements		06				
McDonald, S. C	 1,600	00	1,974	06		
Disbursements		47		1		
Mangach Wm	600	- 00	1,833	47		
Margach, Wm	600, 900	00				
	2,751					
Maughan, J 1	L,400	00	5,251	28		
Disbursements		25				
Olimon I A	L COP	. 00	1,963	25		
	L,625 L,580					
			3,205	60		
Stevenson, A	1,400	00 23				
	004		1,904	23		
	1,500					
Disbursements	428	8 87	1,928	8 87		
Miscellaneous, \$984.19.			-,			
Amor D. H. Constalion Islands in Dog and Lough			20			
Ames, D. H., Caretaker Islands in Dog and Loughborough Lakes	• • • • •	• • • • •	20	00		•
Belleperche, P. A., Valuating Lots in Sandwich	• • • •	· · · · · ·	18	5 00		
East Bilton, George, Caretaker Island North and South Crosby			25	5 00	ı	
Davis, S., Caretaker Islands in Leonard Lake			20	00		
Guthrie, Wm., Caretaker Islands in Devil's Lake				5 00		
Carried forward			52.977	7 01		

Service.	\$ c.	\$	c.	٠	\$	c.
Brought forward		52,977	01		,	
AGENTS' SALARIES AND DISBURSEMENTS-Continued.						
Miscellaneous.—Concluded.						
Hunt, J. McK., Examination of Lots West of Nepi-		. 140	F0			
gon		148				
Hardy and McConkey		500				
Agencies		183				
Phelps			50 25	-		
OTTAWA,				5	3,850	3 20
Oarby, E. J., Agent		1,5	00 00			
Larose, S. C., Clerk		1,0	00 00			
Disbursements		683	51			
Wood Ranging.					3,18	3 5
Adams, William		9	00			
Ainsley, Alex. Allen, R. A.		665				
Disbursements		1,871	75			
Ansley, J. J.		795 730	00			
Ansley, W. E.		815	00			
Barrett, Thomas		1,035	00			
Bailey, J. S		845 368	00			
Berlinquet, J		780 880	00			
Bliss, C. L		830	00			
Disbursements	66 50	1,006	50			
Brown, J. F		532 856				
Buchan, H Buisson, W		134	04			
Burns, G		459 548	00			
Carter, George		675	00			
Castonguay, A. C. Clark, D. A.		1,095	00			
Cleffy, E. D. Comer, B. F.			00			
Chenier, D. A Corrigan, John		940 544				
Corrigan, R. T		1,015 970	00			
Cross. R. J. Dickie, D.		644				
Didier, H						

Service.	\$	c.	\$	c.	\$ c.
Brought forward			23.071	83	57,039 71
Wood Ranging Continued.					
Dougherty, J. M			484	00	
Durrell, W			1,315	00	
Duval, C. A.			840		(•
Eldridge, R		• • • • •	352		
Ferguson, E. A.		• • • • •	100 1,080		
Fink, J			408		1
Fiddes, J	1		440		
Fisher, George			795	00	
Fitzgerald, E. C			910		
Foster, E. G		• • • • •	170		
Fraser, W. A.		• • • • •	$1,250 \\ 650$		
Gamey, W. H.			850		
Gilligan, E			660		-
Gorman, J. P			836	92	
Graham, John			140		•
Hagan, E. C			690		
Hamilton John			1,370	00	
Hartt, J. I.			645		
Hawkins, H. C.			865		` '
Henderson, C., Disbursements			227		
Hogarth, J. R			430	00	
Huckson, A. H.			1,355		
Humphrey, John		• • • • •	416		`
Hurdman, W. H. Hutton, John			635		
Irving, Ed		• • • • •	$1,025 \\ 668$		
Johnson, R. E			280		
Johnson, S. M., Disbursements				33	
Johnston, G. N.			516		
King's Printer, Log Books			2,000		
Kirby, D. F			444 136		
LeBrun, D			476		
Lee, J. B.			940		
Leroy, L. H			380		
Londry, W. E.			719	23	
Long, H. E		75			
Disbursements	11	10	1,036	75	•
Lowe, W. C			404		
Mackey, R. L			308	00	
Macdonell, R. D			920		
Manice, W.		• • • • •	1,480		
Margach, J. A		• • • • •	292		
Margach, William, Disbursements			1,001 20 9		
Menzies, A.			1,070		
Mickolson, John			105	00	
Miller, William			100		
Milway, J. H	• • • • • • •	• • • •	1,565		*
Molyneaux, Geo	• • • • • • •	• • • • •	230 42	00	
Morley, F. W.			404		
Mulroney, W. J. & G.				30	
Murray, William			1,575	00	
			EO 494	ee	57 020 71
Carried forward		• • • • • • •	59,424	00	57,039 71

Service.	\$	c.	. \$	c.	\$ c
Brought forward			59,424	66	57,039 7
WOOD RANGING.—Continued.					
McAuley, W. D			756	54	
McCaw, J. E				00	
McCaw, J. G			1,895	00	
McCallum, Donald				00	
McDonald, Hector, Disbursements				00	
McDonald, Jos			645	00	
McDonald, A. J	1,36	9 00			
McDonald, J. D			1,459		
McDonald, Thomas		• • • • • •	$\begin{bmatrix} 1,405 \\ 177 \end{bmatrix}$	00	
McDougall, J. T				00	
McGillivray, D. D			1,164		
McGregor, C. F				00	
McIvor, J. A.			1	3 00	
McKinley, J. H				00	
McLeod, W. A			1,280	1	
McNamara, J			$\frac{208}{1,398}$	00	
McNabb, Alex.			1,190		
McKenzie, Robert				00	
McWhinney, F				00	
Nevison, W. H	1			5 00 5 00	
Newburn, William Niblett, James		• • • • • •		2 00	
Nicholson, J				7 50	
Oliver, J. A			1	2 50	
O'Sullivan, J			1,366	5 00	
Piggott, John			1,270		
Purdy, John			808	5 00	
Revell, L. O			1,448		
Ridley, Robert			1,20	000	
Rogers, F				92	
Ross, S				3 00	
Rothera, C. F.			468	3 00	
Rusk, O		$\frac{0}{2} \frac{00}{90}$			
			1,07	2 90	
Shaw, Alf.			1	00 0	
Shaw, GeorgeSharpe, J. A				5 00 8 00	
Shields, F				8 00	
Shilling, H			42	2 00	
Simmons, A. G.		• • • • •	980	00 0	
Simpson, William Smith, J. D. C.				0 00 2 95	
${\tt Smyth,\ W.\ F.\ \dots$			25	8 00	
Stein, P			850	0 00	
Stewart, J				8 00 5 00	,
Stewart, AStrickland, R				5 00	
Sutton, J			13	5 00	
Taylor, G. N			238	3 00	
Thompson, G. S			960	00	
	l .		1		

Service.	\$	c.	\$	c.	\$	c.
Brought forward			94,023	51	57,039	71
Wood RANGING.—Concluded.						
apson, R. D			655	00		
npson, W. B			595			
er, L. A			520			٠
hart, A	• • • • • •		1,100			
ent, H. T	• • • • • •	• • • • •	625			
s, George, Disbursements	• • • • • •	• • • • •	488 57	05		
s, J. J			240			
ster, H. R			340			
ster, W. A			1,000	00		
len, P.J			1,695			
e, A. T			880			
ins, G. N			915	80		
on, D.			1,405			
d, W. D			1,114			
, Thomas			1,000			
ORATION AND ESTIMATION OF TIMBER BERTHS.					106,714	17
			0-	•	`	
n, R. A., Disbursements				60		
s, Thomas	• • • • • •	• • • • •	116 185			
derson, Charles, Disbursements				95	1	
gach, William, Disbursements				00		i
onald, Thomas	237					
Disbursements	9	15				
ster, W. A	150	00	246	15		
Disbursements	$\frac{150}{74}$	79				
-			224	79		
FIRE RANGING.					1,218	49
ms, A			382	50		
$\mathbf{n}, \ \mathbf{W}. \ \mathbf{T}. \ \ldots \ldots \ldots $				50		
n, D				00		
n, Wm	• • • • • •	• • • • •		00		
er, Leon				50		
strong, W. H	· · · · · · · ·	 		50		
strong, F. C			375	00		
ard, Jas				00		
d, S		• • • • •		00		
d, A. W	• • • • • •	• • • • •		50	l	
er, H. S				50 50	l	
				22	1	
IEII. G. W		 		00	ŀ	
lett, G. W			55	00	1	
eau, J			1 80	00		
peau, J	• • • • • • •			, EV		
peau, J			97	50		
peau, J. s, Robert on, D. t, D. t, D. nger, E.			97 360	00		
peau, J. s, Robert on, D. g, D. nger, E. ram, A. S.	· · · · · · · · · · · · · · · · · · ·	 	97 360 317	00 50	-	
peau, J. s, Robert on, D. t, D. t, D. nger, E.			97 360 317 387	00	-	
peau, J. s, Robert on, D. s, D. nger, E. ram, A. S. ham, William ningham, E. B.			97 360 317 387	00 50 50 50	-	
peau, J. s, Robert on, D. s, D. nger, E. ram, A. S. ham, William ningham, E. B.		50	97 360 317 387	0 00 7 50 7 50 9 00		

Service.	\$	c.	\$	c.	\$	c.
Brought forward			7,653	25	164,972	3
FIRE RANGING.—Continued.					,	
Bisaillon, J. H	980	00				
Disbursements	534	20	1 514	20		
Blaise, O			$\frac{1,514}{375}$			
	• • • • • •		449		1	
			$\frac{387}{237}$			
			390			
			282			
	• • • • • •	1	390			
Bookhout, HBrasher, S. M	• • • • • •	• • • • • •	410 382			
				50 50]	
			387			
	• • • • • •	- 1	235			
			$\frac{145}{455}$		-	
			372		1	
Brown, Thomas			387			
Bruce, George	• • • • • •	• • • • •	382			
Bruce, J. D			335		1	
D			395 357		ļ	
Buchan, S			360			
Buchanan, R. F			362			
Burger, WilliamBurden, John, Disbursements			382			
Burnbam, H			85 265	65 00		
Burns, W			. 287			
Burns, Gordon			432	50		
Callighan, A			607			
Campbell, W			390 367			
Campbell, F. A. A			332			
Campbell, G. C.			117			
Campbell, S			135			
Carr, S.			$\frac{400}{127}$			
Carruthers, R				00		
			382			
Cassidy, J. Disbursements	392	50 50				
Disbursements	1	90	394	00		
Cassidy, J. A	392	50	0.54	00		
Disbursements	1	50				
Ceasar, H. P			394			
Ohamhann T IZ			365			
Chambers, Thomas		1	110 377			
Chapman, C. N.			360			
Charlton, T			302	50	1	
CT. 1141 1 TYP T			375 410			
Cochlan, E			$\frac{410}{215}$			
Connolly, H. E.			382			
Coombs E H	• • • • • • •	• • • • •	367	50		
Coombs, F. H	• • • • • • •	• • • • •	397			
	• • • • • • • •	• • • • •	382	OU	1	

	ļ			c.	\$ c.
Brought forward			25,815	90	164,972[37
FIRE RANGING.—Continued.					
Cousineau, Charles			360	00	-
Coyne, Phin Disbursements		3 00 7 7 3			
Craigie, Herbert			735	- 1	
Crerar, J. A			357 285		
Crompton, C. R. B. Cross, J. C. G.		• • • • •	292		-
Cuyler, T. W.			380	50	
Davidson, Ira			392		
Davidson, L			390		
Dean, A			402	00 50	
Dedine, Joel			365	00	
De LaRonde, D			422 405		
Dial, A. C			312		
Dixon, J. H			355	00	
Dougherty, E. A			395 382		
Donald, R			360		
Dudgeon, J. T				00 ·	
Dugan, J. K Dumas, A	• • • • • • •	• • • • •	387 422		
Dunsmore, R. L.			340		
Dyson, W			395		
Earl, R. O East, W. J			382 400		
Eilber, George			365	00	
Elliott, J			545 335	1	
Evans, GeorgeFaries, R				00	
Ferguson, George			212		
Ferguson, WilliamFisher, George			382 556		
Flett, N.				50	
Forsyth, W. W.			382		
Foster, E. G			460 395		,
Fuller, E. W			350		•
Gagne, F.		00 80			
Disbursements	101	- 60	1,612	80 #	
Gale, J. W			390	1	
Gammond, G			360		
Gemmill, John Guilfoil, G.		• • • • •	976 365		
Gordon, W. J			93	75	
Gordon, Thomas B			20	00	
Gordon, H. V			350 360		
Guthrie, William			387	50	
Hand, Thomas			640		
Hardy, F			425 207		
Hebert, L			382		
Carried forward			45,835	18	164,972 37
ourried jorward	1	• • • • •	±0,000	10	TOT, 81420

Service.	\$	c.	\$	c.	\$	c
Brought forward			45,835	18	164,972	2 3
FIRE RANGING.—Continued.						
Tractor A	25	2 50				
Hector, A. Disbursements		2 50 5 80	258	20		
Hefferman, J. J			200 385			
Henderson, C., Disbursements			43	5 0		
Higgins, Robert			367			
Higgins, D. G			382	50 66		
Hindson, C				50	1	
Hollis, John				00		
Hornick, George			382	50	1	
Humphrey, W				00		
Hurtibuise, A			:	00		
Husband, A. C				00 50		
Ireton, Frank				00		
Irish, W. M				50		
Irving, E				50		
James, F				50		
Johnston, George				00	1	
Jordan, W. H		• • • • • •		50 50	ĺ	
Kiely, M		.		00		
King. T				50		
Kipplin, J				00		
Kirby, D. F.	• • • • • • • • •			00		
Kirbyson, Henry				50		
Kirkpatrick, P Kruger, A. P				00 50		
Labelle, D				00		
Lalonde E				00	1	
Lalonde, J. M				00		
Lamarche, A				00]	
Langlois, E				00		
Laurien, J				00		
Leblanc, A				00		
Lee, J. B	82	5 00			-	
Disbursements	26	5 59	1 000			
Levis, C			1,090			
Levis, H				00 50		
Locheed, R				2 50	-	
Locke, Alton			695	00	}	
Long, H. E.	\cdots 72	5 00	1			
Disbursements	42	1 59	1 140	. 50	ļ	
Lumsden, J. W			1,146	59 2 50		
Lunan, M.				50		
Luton, R. L				2 50		
Lynch-Peckham Co.		• • • • •	34	00		
MacDonald, S. C	•••	• • • • • •	1	7 00		
Macdonnell, R. D	•••	• • • • • •) 50 00		
Mackie, Thomas				00 (
Margach, William, Disbursements				32		
Margach, J. A.				50	-	
Carried forward	-		01.75			
COSTREO INTIDOTO	1		[61,52]	1 1 1	164,97	63

		c.	\$	c.	- \$ с
Brought forward	•		61,521	14	164,972 3
FIRE RANGING.—Continued.					9
Martin, E. H. May, H. Disbursements	895 72		212	50	
Menard, M. Merchant, J. Merchant, H. Michael, A. Miller, A. S. Mole, W. H. Monahan, P. Morand, L. Morin, John			967 325 387 387 422 360 297 420 390 382	00 50 50 50 00 50 00 00 50	
Muncer, W. G. Murdock John McArthur, J. C. McCann, J. C. McClure, J. R. McColl, Arthur McCormick, R. McDonald, L. P. McDonald, J.			427 355 696	00 00 50 00 50 00 50	
McDonald, J. McDonald, T. McDonald, J. D. McDougall, J. T. McDougall, D. J. McFaul, L. McGregor, G. B. McIntyre, James McKenzie, R. Disbursements		00	335 500 137 31 375 57 415 67	00 50 23 00 50	
McKinnon, H. McKay, J. McLaren, W. A. McLaughlin, J. McMurray, J. J. McNabb, A. McNabb, A. McNally, A. McRae, D. A. McTavish, M. Nadon, A. Nadon, D. Neelon, G. M. Newburn, William Newell, John Newhouse, A. Newhouse, A. Nicholson, J. Nundy, George O'Boyle Bros. Construction Co. Oliver, J. A., Disbursements O'Malley, D. Onegut, J.			311 347 180 110 365 377 295 380 285 152 337 317 740 357 290 345 355 20 20 242 425 417	50 00 00 00 00 50 00 00 00 50 50 50 50 00 0	
Orr, A	• • • • • •		$\frac{25}{77,959}$		164,972 37

Service.	\$	c.	\$	c.	\$	C.
Brought forward			77,959	28	164,972	2 3
FIRE RANGING.—Continued.						
Ouelette, F			382	50		
Palquin, N.		• • • • •	375			
Phead, D.	• • • • • •	• • • • •		00		
Philip, T. Pigeon, C.		• • • • •	$\frac{382}{377}$			
Philon, X.			375			
Pingle, A			387			
Poulin, N			375	00		
Prestley, J			137			
Preston, I. E.			387		•	
Price, P. R.			$\frac{425}{332}$			
Pronger, J. F.				00		
Proulx, A.			387			
Quilty, J. J.			345			
Quinn, J. J.			377			
Reynolds, N.			382			
Richardson, E. S			357			-
Ridley, John			282 435			
Rochfort, A			382			
Rochon, Joseph				00		
Rodden, M. J.			445	00		
Rusk, O	616			-		
Disbursements	398	30	1.014	26		
Russell, A			342			
Ryan, Thomas			177			
Sanderson, F			170	00		
Sauvie, John			275			
Savard, A			395			
Schrenk, N	• • • • • •		342 360			
Scott, Robert			600			
Shabwawekesick, A			22			
Shabwawekesick, J		1	20			
Shabwawekesick, S	• • • • • •	• • • • •	10			
Shields, F	• • • • • •	• • • • •	$\begin{array}{c} 317 \\ 430 \end{array}$			
Shipman, G. W.			337			
Silver, William			140			
Simpson, A			831			
Simpson, J. B.	• • • • • •		280			
Simpson, William	• • • • • • •	• • • • •	352			
Smith, E. J.	• • • • • •	• • • •	$\begin{array}{c} 72 \\ 342 \end{array}$			
Spence, E. J.	• • • • • • • • • • • • • • • • • • •		377			
Spillett, J. J.			367			
Spillett, A			382	50		
Stathem, Henry	• • • • • •	• • • • •	370			
Stewart, C. Storey, V	• • • • • • •	• • • • •	317 272			
Storey, W. E			382			
Strain, J		- 1	342			
Stovin, J. T			380			
Sullivan, J., Sr			387			
Sullivan, J., Jr. Sullivan, Joseph	• • • • • •	• • • •	387			
			207			
Carried forward		1-			164,972	

Service.	\$	c.	\$	c.	\$ c.
Brought forward			96,519	34	164,972 37
FIRE RANGING.—Concluded.					- 11
Sutherland, A. Sweltzer, S. Swinston, Charles Sykes, G. F. Taylor, E. H. Thayer, W. I. Tribert, P. Thompson, G. S. Disbursements	600		355 212	00 00 50 50 00	-
Thompson, J. C. Townsend, E. Travis, T. H. Tremblay, A. Trembley, E. Twigg, J. F. Urquhart, A. Valentine, D. Vivaris, D. Ward, W. D. Watson, M. S. Watts, George, Disbursements Wendt-Wriedt, A. J. P. West, Walter Westman, L. E. Whiteoak, D. Whytock, H. W. Williams, E. L. Williams, R. E. Williams, J. Wilkins, G. N. Winn, P. Wood, H. C. Wood, L. Woodcock, G. Woodseller, J. H. Wright, H. H. Wright, J. J. Yealland, E. R. Young, R.			362 362 362 392 360 548 455 70 380 375 260 262 387 382 380 150 556 407 375 342 412 357 380 387 389 387 389 389 389 389 389 389 389 389	00 50 00 50 50 00 00 00 00 00 00 00 00 0	
					110,111.90
FOREST RESERVES		ĺ			
Temagami Reserve—\$44,620.84.					
Allan, W. R. Asslestine, William Aubut. William Bailey, S. J. Barr, James Barrett, Thomas Disbursements	765		2 367 465 342 790	00 50	
Bissette, Joseph Breadon, L. H. N. Brisbois, P.			840 365 365 360	00 00	
Carried forward	• • • • • •		3,897	74	275,084 27

**				-
Service.	\$ c.	\$	c.	\$ c.
Brought forward		3,897	74	275,084 27
Forest Reserves.—Continued.		٠		
Temagami Reserve.—Continued.				
Butcher, G. C.		362		
Butler, F. B		$\frac{360}{345}$		
Cayen, F. B		247		-
Chanier, H	• • • • • • • • • • •	360		
Chauvin, J. C		$\frac{207}{387}$		
Coatsworth, W. B		347		
Cosh, R. F.				
Coombs, W		352	50 50	
Dambremont, F		380	00	
Davidson, R. D		365		
Desrosiers, J		367 195		
Downs, G				
Duff, H. D		370		
Duff, J. H Earnshaw, P	• • • • • • • • • • • • • • • • • • • •	367 365		
Enright,. T. J		350		
Paries R		1,064		
Forsyth, G. O. Fraser, D. A.		347 357		
Gadsby, H. G.		362		
Garnham, W. H		387		
Fardner, C. A		360 337		
Grenier, J		360		
Friffiths, R. G		337		
Gordon, T. V. Hamilton, J. E.		$\frac{180}{360}$		
farbottle, W. T		340		
farrison, J. W		382		
Hawley, D. J. Hayden, G. F.		$\frac{147}{352}$		
denderson, C		11	00	
ligley, C. E		352		
Hillier, J. H. B. Higgins, L. T.		345 367		
lindson, C	1,300 00	901	00	
Disbursements	273 00	1 570	00	
Holland, A. G.		$\frac{1,573}{302}$		
Holland, B. J.		362		
Hughes, F. G.	• • • • • • • • • • • •	367		
JOCKO, J		360	50 00	
Keenan, J. T.		340	00	
Kelso, R. F. King, C. L.	• • • • • • • • • • • •	360 247		
Knox, J. E		347 297		
Lamarche, A		920	00	
Latoure, J. LeBlanc, O.	• • • • • • • • • • •	360 265	-	
Mackenzie, C. H		365 365		
Maloney, A		110		
Carried forward		23,290	71	275,084 2

Service.	\$	c.	\$		\$ c
Brought forward			23,290	74	275,084 2
Forest Reserves.—Continued.	-				
Temagami Reserve.—Continued.					
Maynard, J. C.			287	50	7
Menard, E.			175		-
Montfort, F			145		
Montgomery, A			492 350		
Mundl, F		• • • • •	372	50	
Murphy, Peter			365 180		
McCullough, D. G.			340		
McElroy, H			355 575		
McGregor, P	 		27		
McLeod, J. D			350		
McNaughton, F. D Disbursements		00 80		1	
McNeil, E. H.			229 367		
McPhee, D			327		
McPhee, H. A			337 372		
Ne!l, W. C			372	50	
Nicholas, H			365 7	00 50	
O'Neil, M. S			357	50	
Pechoski, J,		• • • • •	$\frac{360}{415}$		
	 		267		
Prudhomme, Ad.			445		
Quesnell, F			197 365		
Ranger, P			400	00	
Raymond, A			342	50 50	
Rochon, F			367	50	
Rochon, J			920 355		
Rogers, G. S			335		
	· · · · • • ·		352		
Shelson, HStevenson, L			350 332		
Spence, W. J.			347		-
Speers, A. J			347 365		
Stewart, J. A	· · · · · · ·		365	00	
Sutton, Fred	• • • • • •		347	50 00	
Chompson, Thomas			357		
Turner, J		• • • • •	420		
Valois, P		: : : : :	367 367		
Vivaris, D			920	00	
Vivaris, M			372 357		
Wallace, F			370	00	
Warren, F			347 330		
Carried forward		1			275,084 27

Service.	\$	c.	\$	c.	\$	с
Brought forward			41,838	04	275,084	1 2
Forest Reserves Continued.						
Temagami Reserve—Concluded.						
Vilcox, G. A.			352	50		
Williams, C			360	00		
Williams, Fred			295 357			
Wison, H. P			207			
Vright, R. M			365	00		
Young, R. J. Disbursements		00 30				
			845	30		
Metagami Reserve.—\$8,325.29.				4		
Adams, G			345 365			
alley, H. R.			327			
Bertrand, A			365	00		
Brewster, H. S		00	327	50		
Disbursements		29				
Wanter T. T.			1.085			
Chambers, E. V.			$\frac{382}{400}$			
veline, J. M			400			
arley, J			447			
raser, E. E.	• • • • • •		$\frac{297}{360}$	-		
farris, R. J.			330			
lower, A. R. M.			325			
Iacauley, A. F.Yelson, P. A.	• • • • • •	• • • • •	372 377			
oble, C. V			372			
oisson, A			375			
eid, J. aunders, C. A.		• • • • • •	$\frac{400}{372}$			
tratford, A. H.			297			
Mississaga Reserve.—\$8,915.39.						
lbright, E. J.	,		240	00		
Moright, L			372	50		
rnill, Licknell, R. R		• • • • •	345			
othwell, G. E			367 335			
oyd, W. J			335	00		
urden, William ewar, E. H.	• • • • • •		$\frac{310}{232}$			
obson, H. E			367			
uval, C. A. Disbursements	$\frac{728}{479}$	00				
			1,207			
yson, I aston, L. C		1	362 335			
raham, S. W		1	117			
reer, John			117	50		
ucas, J. F.			$\frac{302}{137}$			
leCaw, J. E.	• • • • • • • •		162			
			58,594			

Service.	\$	c.	\$	c.	\$	c.
Brought forward			58,594	02	275,084	2
FOREST RESERVES.—Continued.						
Mississaga Reserve.—Concluded.						
McDougall, D. McKenzie, W. L. Miller, J. W. Omelia, H. S. Price, H. S. Stephens, A. Thomas, E. G. Fillson, L. B. Wheeler, J. A. Wismer, H.			392 190 257 322 357 330 365 317 367	00 50 50 50 00 00 50 50	0	
Nepigon Reserve.—\$10,556.69.						
Allan, W. N. Blair, H	890		417 255			
Disbursements Bothwell, G. Bouchard, J. Bouchard, N. Cook, K. E.			402 117	50 50	-1	
Davies, E. L. Day, O. DeLaronde, C. Ferris, R. H. Judge, S. Kinnear, A. R. Kerr, A. Lampshire, H. Leitch, P. A.			377 325	50 00 00 00 50 00 50	•	
Disbursements Lucas, F. McGowan, T. McGloughlin, W. B. McIntyre, J. S. McQuay, R. W.	569	24	307 381 392	00 50 25		
Montgomery, R. L. Noxon, S. C. Ritchie, W. Robinson, W. C. Rose, J. Scott, H.		• • • • • •	376 227 77 370 437	25 50 50 00		
Scott, R. R. Smith, J. R.			377 235 375 387	50 00 00		
Eastern Reserve.—\$1,699.87.						
	400 152	00	382 382			
Watkins, R			552 382			
Carried forward		1			275,084	2"

Service.	\$	c.	\$	c.	\$ c	Э.
Brought forward			74,118	08	275,084 2	27
Forest Reserves. - Concluded.						
Sibley Reserve.—\$630.00.						
Cross, J. G. Oliver, J. A. Smeltzer, S.			245 100 285	00		
Quetico Reserve.—\$5,840.82.						
Cox, A. Crawford, E. J. Darby, W. Darlington, E. Fraser, G. Hempshire, F. Henry, A. Johnston, R. Kates, G. Musleman, William Readman, R. Todd, C. C. Wall, G. Wall, S. Watts, George Disbursements	A		347 365 365 365 365 365 365 365 365 365 365	00 00 00 50 00 00 00 00 00 00 00 00		
MINES AND MINING.					80,588 9	10
Miller, G. W. Provincial Geologist, services Disbursements Mickle, G. R., Mine Assessor, services	4,250 486 4,000	10	4,736	10		
Disbursements	75 9		4,759	21		
Price, S., Mining Commissioner, services Disbursements Dance, R. W., services Disbursements	3,200 1,333 827 547	45 50 10	5,908			
Corkill, E. T., Inspector of Mines, services Disbursements	$\frac{2,300}{1,138}$					
Sutherland, T. F., Assistant Inspector of Mines, services	875 524		3,438	80		
Knight, C. W., Assistant Geologist, services Disbursements	2,000 580		1,399 2,580			
EXPLORATIONS AND INVESTIGATIONS.					22,822 6	2
Baker, M. B., Disbursements Bowen, N. L., Disbursements Bruce, E. L. Disbursements	415		27 21			
Burrows, A. G Disbursements	1,900 750		459			
			$\frac{2,650}{}$	16		_

. Service.	\$ c.	\$ c.	\$ c.
Brought forward		3,158,35	378,495 79
EXPLORATIONS AND INVESTIGATIONS.—Concluded.			
Firth, Thomas Harcourt, R. Disbursements Hopkins, P. E. Disbursements	507 70 16 90	35 88 21 00	
McArthur, T. A Disbursements Moore, E. S	12 00	524 60 383 93	
Mahaffy, A. F. Knight Bros. & McKinnon, Geological building Parsons, A. L. Disbursements	485 58	19 84 337 49 418 00	
Freeman, D. Robinson, A. H. A. Disbursements		1,115 31 288 47	
Rogers, W. R	1,725 00 337 32	1,375 05	
Rothwell, T. E. Disbursements Sharpe, D. Disbursements	657 40 359 65	2,062 32 13 55	
Scott, John Disbursements	600 00 223 20	1,017 05	
Smith, R. M. Stewart, R. D. Disbursements		823 20 305 00	
MINING RECORDERS.	101 20	314 26	12,213 30
Bowker, S. T	950 00 307 69		-
Bruce, A. E D, Recorder Millard, C. S., Clerk Graham, F. W., Clerk Gray, J. B., Clerk Dowsley, G. W. Clerk Jamieson, Mrs. E. F., Stenographer	1,326 60 1,125 96 1,022 08 17 30 435 57 45 00	1,257 69	-
Welsh, Mrs. M., Stenographer Clarke, W. K., Clerk Keenan, H. F., Clerk Gordon, T. S., Clerk O'Brien, J. D., Clerk Disbursements	142 69 519 99 572 30 35 00 250 76 1,557 61		
Campbell, C. A., Recorder Washburn, H. Clerk Glazier, M. B., Clerk Young, Miss E., Stenographer Disbursements	750 00 587 30 76 15 456 54 334 40	7,050 86	-
Hough, J. A., Recorder Browning, A. J., Clerk	1,200 00 900 00	2,204 39	
Carried forward		10,512 94	390,709 09

Service.	\$	c.	\$	c.	\$ c.
Brought forward			10,512	94	390,709 09
MINING RECORDERS.—Concluded.					
Keenan, H. F., Clerk Glazier, M. B., Clerk Disbursements	671	96 53 14	0.011	60	
McArthur, T. A., Recorder Disbursements McLaren, Kate, Stenographer	107	00 00 00	3,311		
McArthur, T. A., Salary as Inspector for 9 months McQuire, H. F., Recorder Disbursements	500	00 80	900	00	
Morgan, J. W., Recorder		00 93		80	
Sheppard, H. E., Recorder Gordon, T. C., Clerk Keenan, H. F., Clerk Glazier, M. B., Clerk Disbursements	93		1,269	93	
Skill, A. Recorder Glazier, M. B., Clerk Disbursements	1,200 318		2,814		
Smith, G. T. Recorder Meagher, T. J., Clerk Sarsfield, J. M., Clerk Munroe, Eva L., Stenographer Smith, Miss M. H., Stenographer Ferguson, L. H., Clerk Smith, G. L., Clerk Disbursements	1,100 720 480 912	00 00 00 00 00 50	1,746		
Spry W. L., Recorder		00 75	9,096	75	
Dominion Express Company King's Printer Methodist Book Room Harcourt, E. H., Co.	913 33	02 23 80 31	1,285		
Provincial Assay Office.			1,200		32,804 37
Turner N. L	1,200 407	00 54	1 605	5.4	
Rothwell, T. E. Disbursements	1,000	00 55	1,607		
Disbursements Supplies				90 02	9 699 01
Carried forward					$\frac{3,622 \ 01}{427,135 \ 47}$

Service.	\$	c.	\$	c.	\$	c.
Brought forward					427,135	47
Cullers' Act.				1		
Oliver, J. A., Disbursements Margach, Wm., Disbursements McDougall, J. T., Disbursements Watts, George, Disbursements Meelor, C., Services McLeod, D., Services Livery Advertising Floyd, Wm., Rent of tables Town of Fort Frances, Rent of hali			26 2 2 4 5 68 20 5	75 15 35 75 00 50 25 20 00	145	95
Surveys					167,428	64
BOARD OF SURVEYORS					200	00
Contingencies.						
Departmental.				}		
Printing and Binding	4,33 4,61		8,945	66		
Postage	1,93 40	9 51 7 45	0,510	, 50		
Telegraphing Bell Telephone Company Car Fare	60	0 85 6 20 0 00	2,346	5 96		
Subscriptions	28	9 45 7 49		7 05		
Typewriters, rent and repairs White, A., Travelling expenses Whitson, J F., Travelling expenses Rorke, L. V., Travelling expenses Yates, G. W., Travelling expenses	34 36	8 45 3 64 4 35 5 15		2 00		
Extra Clerks		98 46 80 01	77:	1 59		
	-		2,97	8 47	20,89	8 67
BUREAU OF MINES.						
Printing and Binding	1	21 59 16 52	7,03	8 11		
Telegraphing Express and Cartage Advertising Subscriptions	60	06 06 75 40 38 75 35 35	.,		÷	
Gibson, T. W., Travelling expenses	10	90 00 00 50	1,67	5 56	٠	
Whitson, J. F., Travelling expenses Typewriters rent and repairs		51 30 10 95	15	1 80		
Bell Telephone Company		30 40	14	1 35		
Carried forward	J		9,00	6 82	615,80	8 7

Appendix No. 6.—Concluded.

Service. \$ c.	\$	c.	\$	c.
Brought forward	9,006	82	615,808	78
BUREAU OF MINES.—Concluded.				
Extra Clerks	119	49		
Nicholas, F. J., Preparing index 96 50 Determination of Leases 2,055 86 Legal Fees 118 01				
Sundries 636 30	2,906	67	12,032	98
SPECIAL SERVICES AND UNFORESEEN EXPENSES.			, 000	
McNeil, W. K., Services				
UNFORESEEN AND UNPROVIDED.	195 1,321		1,516	67
			1,010	
Funeral Expenses of N. L. Jones, Forest Reserves Funeral Expenses of F. Ireton, Fire Ranger Funeral Expenses of Donald Ross, Clerk in		50 00		
Department	4	40 00		
McIntosh, H. D., Refund Cullers Fee	250	00	453	90
Refunds			20,546	
			650,358	8:

D. GEO. ROSS, Accountant.

AUBREY WHITE, Deputy Minister, Lands and Forests.

Appendix No. 7.

Statement of Expenses on account of various services under the direction of the Department of Lands, Forests and Mines for the year ending October 31st, 1911.

Service.	\$	c.	\$ c.
ALGONQUIN PARK	• • • •		18,044 89
RONDEAU PARK			2,640 36
VETERANS COMMUTATION			1,050 00
Bounty Act VII., Edward VII., Cap. 14.			
Deloro Mining Reduction Company	140	0 09	
Coniagas Reduction Company	42	1 32	561 41
•			\$22,296 66

D. GEO. ROSS, Accountant. AUBREY WHITE.

Deputy Minister of Lands and Forests.

Appendix No. 8.

WOODS AND FORESTS.

Statement of revenue collected during the year ending October 31st, 1911.

-		\$	c.
Amount	of Western collections at Department	1,596,520	65
do	Belleville collections	19,461	
do	Ottawa collections	95,456	55
	3	\$1,711,438	87

J. A. G. CROZIER, Chief Clerk in Charge. AUBREY WHITE,
Deputy Minister.

Appendix No. 9.

PATENTS BRANCH.

Statement of Patents, etc., issued by the Patents Branch from 1st November, 1910, to 31st October, 1911.

Crown Lands	851
School do	22
Mining do	687
Public do (late Clergy Reserves)	16
Free Grant Lands (A. A.).	117
do (Act of 1880)	439
Mining Leases	244
Licenses of Occupation.	36
Crown Leases	25
Crown Lands (University)	21
Free Grant, Act of 1901 (Veterans)	675
Temagami Islands	3
Rondeau Leases	1
Pine	1
Total	3138

CHARLES S. JONES.

Chief Clerk.

AUBREY WHITE,

Deputy Minister.

Appendix

WOODS AND .

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

	Area covered		Saw log	s.		
Agencies.	by timber license.	P	ine.	Other.		
	Square miles.	Pieces.	Feet B.M.	Pieces.	Feet B.M.	
Western Timber District Belleville Timber District Ottawa Timber District	$12,953\frac{1}{4}$ $1,016\frac{1}{2}$ $5,380$	10,827,755 361,941 1,535,284	464,040,275 10,305,935 76,082,079	1,435,747 248,085 530,070	54,295,082 8,826,378 19,547,926	
District	19,3493	12,724,980	550,428,289	2,213,902	82,669,386	

General Statement

	Cord	wood.	ark.	ау			·S.	le ks.	.00d.
Agencies.	Hard.	Soft.	Tan Bark	Railway ties.	Posts.	Poles.	Stave Bolts.	Shingle Blocks.	Pulpwood
A POLICE AND A POL	Cords.	Cords.	Cords.	Pieces.	Cords.	Pieces.	Cords.	Cords.	Cords.
Western Timber District Belleville Timber	22,029	34,995	16,414	4,257,445	139	3,667	6,973	. 12	82,739
District Ottawa Timber	127	72	156	7,674	328	1,140			201
District		1, 6 63		5,713	248	10,144			7,786
connact of the control of the contro	22,156	36,730	16,570	4,270,832	715	14,951	6,973	12	90,726

J. A. G. CROZIER, Chief Clerk in Charge

No. 10.

FORESTS.

Rent and Bonus during the year ending 31st October, 1911.

DESCRIPTION OF TIMBER.

	Boom an	nd Dimensio	on.	Square	Timber.	Piling.				
	Pine.	0	ther.	Pi	ne.	Spruce.				
Pieces.	Feet B.M.	S.M. Pieces. Feet B.M.		Feet B.M. Pieces. Feet B.M.		Pieces.	Cubic feet.	Pieces.	Feet B. M.	
221,701	23,673,569	59,507	7,925,920	12,927	552,876	2,750	248,05			
3,095	427,866	3,726	723,646							
31,059	3,067,553	18,405	1,897,056	75	2,693					
255,855	27,168,988	81,638	10,546,622	13,002	555,569	2,750	248,058			

of Timber.-Concluded.

Amounts accrued.

Trans- fer bonus.	Interes	t.	Trespas	ss.	Timber dues.		Bonus		Deposits timber sa 1911.		Groun rent.		Total.	
\$ c, 6,490 35	\$ 9,491	c. 38	\$ 22,187	с. 13	\$ 1,196,054	c. 32	\$ 582,891	c. 67	\$ 54,802	c. 17	\$ 68,574	c. 00	\$ 1,940,491	c. 02
230 00	27	55	4,887	77	23,318	10					5,330	00	33,793	42
390 00	675	82	4,580	71	141,414	17			• • • • • • • •		29,913	00	176,973	70
7,110 35	10,194	75	31,655	61	1,360,786	59	582,891	67	54,802	17	103,817	00	2,151,258	14

AUBREY WHITE,
Deputy Minister.

Appendix No. 11.

Statement of the work done in the Military Branch of the Department of Lands, Forests and Mines, during the year ending the 31st October, 1911.

Letters received	6
Location Certificates issued	
Surrenders References for Patents issued Locations cancelled for non-compliance with the regulati	

R. H. BROWNE,

AUBREY WHITE,

Chief Clerk in Charge.

Deputy Minister.

Appendix No. 12.

Statement of the number of Letters received and mailed by the Department in 1909, 1909-10 and 1910-11.

		Let			•	s and from			
Year,	Sales and Free Grants.	Surveys.	Woods and Forests.	Mines.	Totals. Names indexed.		Orders-in-Council.	Returned letters.	Letters, circulars reports mailed f Department.
1909 (10 months). 1909-10. new fiscal year.	19,500 23,700	16,016 18,290	9.086 9,752	8,398 8.498	53,000 60,240	59,400 67,210	178 201	72 81	62,800 69,400
1910–11.	24,705	14,478	9,212	8,220	56,615	63,200	180	94	67,150

FRANK YEIGH, Registrar, AUBREY WHITE,
Deputy Minister.

Appendix No. 13.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties and of patents issued under "The Free Grants and Homesteads Act" during the year ending 31st October, 1911.

Township.	District or County.	Ag	ent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents
Baxter	Muskoka	I B Brown I	Branchridge			1	18		
Brunel	Mushuna	J. D. DIOWII, 1	"			1	10		
Cardwell	**	44	44	1	600			5	
Chaffey	14	44	44	1	000				
Draper	"	44	**	1	100			1	
Franklin	44	44	16	3	314	5	204	2	
Freeman	44	44	44	9	1.353	10	303	2	1
Macaulay	44	"	44	3	298	i I	909	3	i
Medora	44	**	**	9	230	i	153		
Monck	**	**	4.6				1.02		
Morrison		44	14	7	827	9	61	9	1
Muskoka		**	**	1	100	- 1			
McLean		14	44	3	298	• • • •	• • • • • •	1 4	
Oakley	44	44	**			$\ddot{2}$	123	7	
		46	44	10	1,505	1			
0 1	44	44	44	2	$\frac{664}{400}$	- 1	$7\frac{1}{2}$	3 2	
Ryde	Haliburton		"	8			• • • • • •	4	
Sincloin	Muslesles	44	44	0	801		915		
	Muskoka	44	44	8	1,330	2	215	6	
Stephenson		44	44	1	100	• • • •	• • • • • • •	1	
Stisted	11	44	44	1	100		• • • • • •	1	
Watt	44	44	44	3	351	• • •		3	
Wood				4	630	8	69	4	1
Rurnoo	Parry Sound	F D Domell	Downer Cound	1	206	1	46		
	rarry Sound	r. n. rowen,	rarry Sound	14		8			
Carling Christie	44	**	44	7	1,988 871	0	131	$\begin{vmatrix} 8\\3 \end{vmatrix}$	
Conger		44	"	8		i	91	1	
Courner			44	-	1,072		$\frac{2\frac{1}{2}}{76}$	-	
Cowper		44	"		• • • • • • • • •	2	76 5		-
Ferguson			44	1	100	1	7		
Foley Hagerman		44	44	1	100	2	164	i	
Harrison	**	44	44		9991			1	2
Humphrey			**	1 1	2221	10	84	i	4
MaConkow			14	1	190		121	1	
McConkey			44		111	4	121		
McDougall			44	1	111		• • • • • •		1
McKellar			44	3	292		111	1	
McKenzie			44		1 140	3	111	1	
Monteith		**	44	7	1,140		19	2 2	
Shawanaga	14	- 44	46	2	343	2	19	2	• • •
Wilson			••	[• • • • • • • • •		• • • • • • •		
Chapman	Parry Sound .	Dr I S Frag	hown Magnet						
опаршац	rairy Sound .	DI. J. B. 1166			517	1		7	
Croft	44	**	awan.	. 0	917	i	32	'	1
Ferrie	**		**		• • • • • • • • •	1	92		1
Gurd		44	44		202		486		
	64	"	•	1	202 293	5		2	
Lount	**			2		1	3	4	
Machar			**	4	512	1	38	4	
Mills Pringle	**	**	44	1	$\frac{100}{100}$	i	100		
									1

Township.	District or County.	. A	Agent.		No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Ryerson	Parry Sound	Dr. J. S. Fr		Aagnet- awan.	3	445			3	3
Spence Strong	66	"	"	**	6 2	840 292			1	
	Parry Sound	W. Jenkin, I	Emsdale.		7	887			7	4
Bethune		"	"		7 3	997	1 4	400	6	4 3 5 8 4
Joly McMurrich	"	**	**		5	584 508	2	409 22	3	8
Perry	"	"	**				l			4
Proudfoot	"	"	"		1	200		· · · · · · ·	1	5
Hardy Himsworth	Parry Sound	H. J. Ellis, I	Powassan		15	2,261	 1	21	 ii	
Laurier	"	**	**		1	100			Î	
Nipissing	46	"	"		3		1	$\frac{1}{2}$	1	4
Patterson			••		1	194	1	$5\frac{1}{2}$		2
Bonfield		W. J. Parson	as, North	Bay	9	1,060	• • •		4	2
Boulter (pt) Chisholm		**			15 15	1,981	3	182	7	8
Ferris			**		16		1 -1		11	6
Glamorgan Hindon Lutterworth Minden Snowdon	66 66 66	R. H. Baker,	66 66 66	••••	1 13 2 6 3 6	251 654 285 784			2 5 1 2 4	1 4 2
Stanhope Anstruther	" Peterboro'	William Hal	" es Ansle	v	7 1	551 85		•••••	8	1
Burleigh, N.D.	**	"	£6	,	1	81			î	
", S.D.	**	44	"			• • • • • • • •	1	2	• • • •	• • • •
Chandos Methuen		"	"		i	100	• • •	• • • • • • •		····i
Cardiff	Haliburton	Inmes Wilso	n Vinmo	unt	5	737		_	4	1
	Peterboro'	"	·II, IXIIIII	ипт	1	103				î
Galway	Peterboro'	"	"		2	199			2	
Monmouth	Haliburton	"	"	i	13	1,489	• • •	• • • • • • •	10	3
Carlow	Hastings	J. R. Tait, L	'Amable.	•••••	3 3	384 391	···i	5	₃	···i
Cashel	44	"	"		···i	07	• • •	,	1	1
Faraday	66	"	66		3	283			2	$\overset{\cdots}{5}$
Herschel	66	"	**		13	$1,440\frac{1}{2}$			5	1
Limerick	**	"	44		1	134	• • •		1	5
Mayo	"		**		···· ;	740	• • •	• • • • • • •	4	$\frac{7}{6}$
Monteagle McClure	**	"	**		7	654	2	39		5
Wicklow	"	**	46		5	570	,		2	4
Wollaston	54	"	**	ł	1	100	1	20	1	2
Algona, S Brougham Brudenell	Renfrew	Adam Prince	e, Wilno.		2 13 5	$\begin{array}{c} 200 \\ 1,803 \\ 497 \end{array}$			2	1 5 1

Township.	District or County.	Ager	ıt.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.	
Burns Grattan Griffith Hagarty Jones Lyell Lyndoch Matawatchan Radcliffe Raglan Richards Sebastopol Sherwood	66 66 66	11 11 11 11 11 11	/ilno	10 4 1 2 2 7 12 1 4 8 4	999 409 191 167½ 200 1,182 1,482 100 383 876 287	1 4 1 4 1 1 1	166 4 29 3½ 4	8 1 2 2 4 4 1 4 3	3 1 7 13 1 1 6	
Algona, N Alice Buchanan (pt) Fraser Head Maria McKay (pt) Petawawa Rolph Wilberforce Wylie (pt)	"	D. B. Warren, F	embroke " " " " " " " " " " " " "	2 2 2 3 1 3 1 2	200 200 267 219 	2 2 8		2 2 1 1 3	2 4 1	
Calvin Cameron (pt). Lauder Mattawan Papineau	Nipissing	Robert Small, M	lattawa	3 3 4		···· ··· 1	50	2 1 2 4		
Korah Parke Prince	Algoma	B. J. Rothwell	, Sault Ste. " Marie		294			2	2 1 7	
Aberdeen add. Galbraith Lefroy Plummer add.	Algoma	Thos. Buchanan	Thessalon.	3 4 2	528½ 640½ 320		80	1 1	3	
St. Joseph Is'd	Algoma	W. E. Whybourn	e, Marksville	9	906			9	7	
Channel Is'd	6.		**			1	10	• • • •		
Merritt		R. J. Byers, Mas		2	250½	2	139		4	
Blake Conmee Crooks Dawson Road. Dorion Gillies Gorham Lybster Marks	Thunder Bay.	W. A. Burrows, "" "" "" "" "" ""	Port Arthur " " " " " " " " " " "	14 21 12 28 7 10 36 11 15	2,162 3,285 2,040 2,953 1,105 1,566½ 5,048½ 1,627¾ 2,369	3 4 5 2 5 1 20 3 5	400 530 494 77 $628\frac{1}{2}$ 957 $285\frac{1}{2}$ $321\frac{1}{2}$	5 26 5 99 6 5 31 7 31	5 15 1 8 6 6 15	

Township.	District or County.	Aget	ıt.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
McGregor	Thunder Bay.	W. A. Burrows,	Port Arthur	13	2,068			8 7	7
McIntyre	**		"	8	1,183	2	-3		
O'Connor Oliver	44		"	14 16	$\frac{2,178}{2.568}$	1 3	160 71	14 13	
Paipoonge, NR	"	"	"	2	200			1	. 8
" SR	**	"		9	1,100	3	116	8	12
Pardee	::		**	19	2 0651	4	2221	14	5 7
Pearson		"	"	20	3,065½ 3,086	4	323 <u>1</u> 203	14 20	6
Strange		"	"	28	4,383	7	8703	23	8
Ware (pt)	**	"	"	32	$5,529\frac{1}{2}$	9	$608\frac{1}{2}$	18	4
Atwood	Rainy River	William Camero	n Stratton			1	1		- 1
Blue	"	" Camero	m, Stration	14	2,054	8	2871	11	5
Curran	"	"	"	10	1,536	3	-48	6	
Dewart	"	"	**	2 2	3201	1	$\frac{36\frac{1}{2}}{90}$	2	2
Dilke Morley		"	**	9	242 1.132ե	1 5	82 124	3	6
Morson	"	"	"	54	8,050	19	830	29	
McCrosson	"	"	"	22	3,070	4	130	18	3 7
Nelles		"	"	12 9	1,528	6 5	135 54	10 6	7
Pattullo Pratt	"	"	"	5	1,080½ 800	2	126	8	1 5
Rosebery	"	"	**						
Shenston	"	"	45	1	162	2	86	1	····5
Sifton	"		7	15 14	2,517 1,958	4	169 205	12 14	8
Spohn Sutherland	"	"	"	17	$\frac{1,350}{2,881}$	5	250	14	2
Tait	" ,	"	"	9	1.445	9	216	10	6 3
Tovell	"	"	44	15	$2,471\frac{1}{2}$	5	225	9	3
Worthington				2	323	2	6	4	1
Aylsworth	Rainy River .	Alex. McFayden	, Emo					1	1
Barwick			**]			• • • •
Burriss Carpenter		"	"	20 8	3,011 1,342	7 5	370 215	16 6	12 8
Crozier		••	**	12	1.835≩	4	10	7	6
Dance	"	**	••	20	3,331	5	174	18	6 3 7
Devlin		**	"	2 15	324	4	125 66	14	7 2
Dobie Fleming	"		**	19	2,392	3	00	14	1
Kingsford	••	**	**	20	3,084	10	508	15	10
Lash	**	**	44	5	812	4	92	6	11
Mather			"	13 12	$\frac{2,145}{1,924}$	1	. 40	10 11	10 5
Miscampbell . Potts	"	44	"	42	6,661	3	$19\frac{2}{2}$	20	4
Richardson	**	"	**	24	3,9501	2	120	8	4
Roddick	**	**	"	• • • •	• • • • • • • •	1	123	• • • •	2 2
Woodyatt							• • • • • • •		_
Aubrey	Kenora	R. H. Pronger, I	Oryden	11	$1.501\frac{1}{2}$	2	31	9	5 3
Eton	44		44	5	7071	$ \cdots $	• • • • • •	3	3
Langton Melgund		4	44	1 21	$\frac{205}{2,965\frac{1}{2}}$	···i	48	$\frac{1}{2}$	4
Mutrie		"	11	16	2,581	3	159	13	6
Rugby	46	••	"				• • • • • •	;	• • • •
Sanford	"	"	**	6	835 827 <u>1</u>	···i	33	4	4 2
Southworth	**	**		13	$2,297\frac{1}{2}$			5	
	*	,		,	,	,		,	

Appendix No. 13.—Concluded.

Township.	District or County.	Agent.	No. of persons located.	No of acres in located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Van Horne Wabigoon Wainwright Zealand		R. H. Pronger, Dryden	2 14 9 13	1,4291	1 1 2 5	$33\frac{1}{2}$	1 10 7 8	8
Melick Pellatt	Kenora	W. L. Spry, Kenora	20 18		4 4	242 74	24 32	
Blezard Capreol Hanmer Lumsden	44	J. A. Lemieux, Blezard "Valley "" "	9 26 15	$5,628\frac{3}{4}$ $2,040$			1 4 9	10
Balfour Broder. Chapleau Dill. Garson Morgan (pt) Neelon Rayside.	Algoma Sudbury	J. K. MacLennan, Sudbury	7 14 3 6 11 9 14 4	$ \begin{array}{r} 1,958\frac{1}{2} \\ 173 \\ 952\frac{1}{2} \\ 1,423\frac{1}{2} \\ 1,187 \\ 1,944 \end{array} $	3 6 6	663 186 1,264	1 6 2 5	4 6 2 11
Casimir Dunnet Hagar Jennings	" " Nipissing	Emile Langlois, Warren	7 6 2 5 6 7 7	882½ 320 771 844 1,065	1 	160	1	1 3 4
Grant Macpherson Martland	Sudbury Nipissing	J. A. Philion, Sturgeon Falls.	8 11 11 9 4 6	$ \begin{array}{c c} 1,759 \\ 1,662 \\ 1,382\frac{1}{2} \\ 637 \end{array} $	1 4	$7\frac{1}{2}$	1 1	
" N Clarendon	Addington Frontenac	Charles Both, Denbigh	5				3 2	2
Denbigh Palmerston	Lennox and Addington Frontenae	66 66 68 66	₁	212			1 1	i
Airy Finlayson Murchison Ṣabine	Nipissing	Unattached	7 1 6	200	1	1	1	1 2
		**	1,568	224,042	418	18,8311	1069	899

W. C. CAIN, Clerk in Charge. AUBREY WHITE,

Deputy Minister.

Appendix No. 14.

Statement of Municipal Surveys for which instructions issued during the 12 months, ending October 31st, 1911.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.
1	S. E. Farley	682	Nov. 16th, 1910	To survey the original road allowance between lot 30, concession 2, Ottawa Front, and lots lettered J, K, L, M and N, concession A, Rideau Front, in the township of Nepean, in the county of Carleton, and to define said road allowance by permanent monuments on each side thereof.
2	W. J. Moore	683	Aug. 24th, 1911	To survey the original road allowance between the 6th and 7th concessions of the township of Elmsley North, in the county of Lanark, from lot 22 to lot 30, inclusive, or between such points in which an original or undisputed point can be found, and to define said road allowance by permanent stone or iron monuments on each side thereof, in accordance with the provisions of the Revised Statutes of Ontario, 1897, chapter 181, section 14.

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 15.

Statement of Municipal Surveys confirmed during the 12 months ending October 31st, 1911.

No	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.	Date when confirmed under R.S.O., 1897, Chap. 181, secs. 10- 15 inclusive.
1	George L, Brown	622	Jan. 27, 1900	To survey part of the line between concessions 4 and 5, in the township of Williamsburg, in the county of Dundas, from the west side of lot No. 9 to the eastern boundary of the township, and to define the road allowance between said concessions, between said points with stone or iron monuments planted on either side of said road allowance.	
2.	Alfred J. Cameron	648	March 29, 1904 .	To survey the right of way or road allowance along the west bank of the Otonabee River, from Wolfe Street to Hunter Street, in the town of Peterboro', and to define the western limit of the said right of way or road allowance by stone or iron monuments, to be planted at the intersection of the several streets from Wolfe Street to Hunter Street with said western limit, and at other places if necessary.	Feb. 21, 1911.
3.	E. T. Wilkie	679	Dec. 27, 1909	To survey the concession line between the 8th and 9th concessions of the township of Hinchinbrooke, from lot 12, south, to lot 8, and to define the same by permanent boundaries.	Nov. 18, 1910.
4.	E. T. Wilkie	680	Jan. 18,1910	To survey the town line be- tween the townships of Nepean and North Gower, in the county of Carleton, and to plant permanent monuments at all points of intersection with concession lines or side roads running thereto through either township.	Dec. 9, 1910.

GEORGE B. KIRKPATRICK, Director of Surveys. AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys in progress during the twelve months ending October 31st, 1911.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount Paid,
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	June 10, 1911. July 25,1911 & June 20, 1911. May 2, 1911. June 20, 1911. May 4, 1911. May 17, 1911. June 8, 1911. July 18, 1911. June 17, 1911. June 12, 1911. June 2, 1911. June 2, 1911. June 28, 1911. May 20, 1911. June 8, 1911. June 8, 1911.	D. Beatty E. D. Bolton H. J. Beatty Code & Code J. S. Dobie C. H. Fullerton J. W. Fitzgerald T. D. Green D. J. Gillon A. D. Griffin Jas. Hutcheon J. E. Jackson J. J. Newman Paulin & Anderson Sutcliffe & Neelands Speight & Van Nostrand Walter Smith	sing To survey base and meridian lines, District of Sudbury To survey base and meridian lines, District of Nipissing To survey township outlines, District of Nipissing To survey Zealand, additional, and townsite in Wabigoon Township, District of Kenora To traverse the Mattagami River, District of Sudbury	\$ 5,200 4,300 1,700 6,000 5,000 5,000 6,300 7,000 3,000 700 6,200 4,700 2,500 3,000 4,000 8,000 2,900 20,440
			trice of regiona	101,440

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 17.

Statement of Crown Lands surveyed, completed and closed during the 12 months, ending October 31st, 1911.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of acres.
_				\$ c	
1	March 19, 1910	A. G. Ardagh	To survey islands in Georgian Bay in front of Harrison and	T 007 10	
2	March 21; 1910	D. Beatty	Shawanaga To survey islands in Georgian Bay in front of Conger and	5,635 43	
3	March 23, 1910	C. H. Fullerton	Cowper To survey islands in Night Hawk Lake in townships of	4.378 84	
4	April 18, 1910	C. H. Fullerton	Cody and Macklem To survey outlines of townships surrounding Night Hawk Lake and to south thereof, District	537 75	
5	April 16, 1910	J. H. Burd	of Nipissing To survey islands in Georgian Bay in front of McDougall	855 84	
6	April 22, 1910	L. R. Ord	and Carling	2,903 18	
7	April 18, 1910	C. H. Fullerton	Bay in front of Wallbridge To survey Night Hawk Lake and islands therein, in townships of Carman, Thomas and Lang-	1.535 63	
8	May 2, 1910	Speight & Van	muir	803 47	
		Nostrand J. W. Fitzgerald.	lines, District of Algoma To survey outlines of townships,	72 00	
10	May 10, 1910	Alex. Niven	To survey town plots of Superior Junction and Reddit	565 01	
11	May 11, 1910	J. Hutcheon	District of Kenora	1,387 58	
12	May 17, 1910	A. S. Code	District of Sudbury To survey outlines of townships north of Aylmer, District of	2,958 50	53, 812
13	May 27, 1910	J. J. Newman	To survey outlines of townships north of McNish District of	675 60	
14	June 9, 1910	Bush & Paulin	Nipissing	2,359 68	
15	July 5, 1910	W. Beatty	Algoma	1,800 52	
16	July 17, 1910	A. D. Griffin	To survey residue of townships of Maisonville and Beneit	1,480 60	34,806
17	Sept. 2, 1910	E. Seager	District of Nipissing	233 10 367 93	27,106
18	Aug. 19, 1910	T. B. Speight	To survey town plot of Missinabi, District of Algoma	488 35	
19 20		L. V. Rorke E. Seager	Inspection of surveys To survey town plot of Waldhof, District of Kenora	1,338 72	
21	May 22, 1911.	Cavana & Watson	To survey township outlines, District of Sudbury	5,406 60	
22	June, 19, 1911.	C. E. Fitton	Inspection of surveys	2,669 20	

Statement of Crown Lands surveyed, completed and closed during the 12 months.-Continued.

oN.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amoun paid.	t	No. of acres.
				\$	c.	
23	May 17, 1911	W. J. Johnston	To survey township outlines,	·		
94	May 5 1011	Long & Poss	District of Sudbury To survey township outlines,	4,154	09	
24	may 9, 1911	Lang & Ross	District of Sudbury	5,391	15	
25	May 22, 1911	H. M. Anderson		0,501	-	
			wishguia, District of Algoma.	979	51	
26	May 17. 1911	Pierce & Phillips	To survey broken lot No. 5, con. 1, Tisdale, District of		ĺ	
			Sudbury	115	45	
27	July 26, 1911	H. M. Anderson	To survey town plot of Matta-	110	-0	
			gami, District of Sudbury	948	00	
28	July 26, 1911	H. M. Anderson	To survey town plot of Low Bush, District of Sudbury	1 206	00	- Co
90	May 8 1911	T. J. Patten	To survey township outlines,	1,206	UU	
29	may 0. 1911		District of Sudbury	5,729	40	
			Rice Lewis & Son, iron posts	265		
			C. Tarling & Co., mounting maps	662	15	
			E. H. Harcourt & Co., printing maps	7,113	50	
			Link & Henderson, horse	,,110		
			drowned on R. W. Demorest's			
			survey	200	00	
			Rolph Clark & Co., maps Georgian Bay	-14	00	
	•		J. A. Pollard, mounting maps.	514 20		
			Map Publishing Co., maps		00	
				\$65,988	64	115,724

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 18.

SURVEY CERTAIN BASE AND MERIDIAN LINES, DISTRICT OF SUDBURY.

WINDSOR, ONT., Dec. 17th, 1910.

SIR,—In compliance with your instructions dated May 27th, 1910, I have completed the survey of certain base and meridian lines west of Lake Temagami and north of the Townships of McNish and Pardo in the District of Sudbury.

I left Windsor on the 1.20 a.m. Canadian Pacific Railway train, July 19th, and arrived in Toronto at 8.30 a.m., where I found that owing to a strike on the Grand Trunk, trains were not running between Toronto and North Bay, so I had to get our tickets changed and proceed via Canadian Pacific Railway to Sudbury, thence to North Bay where I arrived about 10.30 a.m., July 20th, and found that the men I had engaged from Sturgeon Falls, had gone back home on learning that the Grand Trunk trains were not running, so I had to drop off, telegraph to Sturgeon Falls and wait until the following morning before I could proceed north.

I left North Bay at 12.45 p.m. on July 21st, and proceeded to Temagami Station where I found the boat waiting, so I arrived at Temagami Inn with eleven men and my supplies about 6 p.m. the same day. That evening I engaged a man at Bear Island, who knew the canoe routes and portages, and arranged with the Steamboat Company to take the party and supplies to Skunk Lake Portage the following morning. I got in to Lake Manitopopawgi on the evening of July 23rd, where I camped and made preparations to commence my survey. On Monday the 25th, I located the north boundary of the Township of McNish and commenced my work proper on Tuesday, July 26th.

I commenced my survey at a 1½ inch iron post, planted beside a 6 inch pine post in a cairn of stones, marked "XXVI" 1 Con. "VI" McNish, on southwest side; "XVIII" 1 Con. "VI" Pardo, on southeast side: "XIX" on east side and "XXVII" on west side. Thence I ran the second meridian due north six miles. From the 6th mile post on the second meridian I ran the first base line east 6 M. 2.85 chains to the west shore of Lake Temagami. I then returned to the second meridian and continued north 12 miles numbering the posts on the south side from 1 to 6 between the first and second base lines, and from 1 to 6 north of the second base line. I then returned to the second base line which I ran west from the 6th mile post on the second meridian, numbering the posts on the east side.

I then started and ran the second base line east to Lake Temagami, numbering the posts on the west side from 1 to 6 between the second and third meridians and 1 to 2 M. + 26.50 chains between the third meridian and the lake. I then ran the third meridian north 6 miles numbering the posts on the south side. I then returned to the first base line and ran west from the 6th mile post on the second meridian to the east boundary of the Township of McCarthy which I intersected at 3.54 chains south of the northeast corner. From the northeast corner of the Township of McCarthy I ran the first meridian north intersecting my second base line at 6 M. - 5.12 chains, from the northeast corner of the Township of McCarthy and 6 M. + 4.14 chains west of the second meridian. From the second base line I continued my first meridian north 12 M. 10 chains to the northeast corner of the Township of Seagram, numbering the posts from 1 M. to 6 M. between the second and third base lines and from 1 M. to 6 M. + 10 chains along the east boundary of Seagram. I then ran west along the north boundary of Seagram until I intersected the production of the west boundary of Seagram at 7 M. - 7.63 chains and

5.94 chains north of the north boundary of the Township of Turner. I then returned to the 6th M. post north of the second base line on the first meridian where I commenced my third base line and ran east to Lake Temagami, intersecting my second meridian at 6 M.—6.51 chains, north of the second base line, and the third meridian at 6 M.—6.20 chains north of the second base line.

Where a mile post or corner intersection would fall in a lake, a post was planted on the shore and marked with the chainage to the point where the post was planted.

All posts were marked in accordance with your instructions as shown by accompanying plan and field notes. All iron posts were 3 feet long, 1% inches in diameter, forged at the top, pointed at the bottom and painted red.

I took frequent observations on Polaris at elongation and used an azimuth of 1 degree .44 m. for the field work. The magnetic variation is fairly uniform, varying from 8 degrees to 10 degrees west for the most of the territory worked over, the only marked change being on the second meridian in the 6th M. north of the Township of McNish, where the compass varied from 8 degrees west to 30 degrees east in a distance of about 3 chains.

All lines were well cut out and blazed.

The Sturgeon and Obabika were the only large streams crossed during the progress of the work, but there are quite a number of lakes of various sizes, the more important of which were fairly accurately shown on the projected map accompanying your instructions.

The country on the whole is quite rocky, rough and hilly, particularly the east part around Lake Temagami and the other lakes, but the land is much more

level and far better timbered along the first meridian.

The timber consists chiefly of white Norway and Banksian pine, spruce, white and yellow birch, poplar and balsam, with small patches of hard maple and red oak; the latter two are mostly scrubby and of little commercial value. The pine is quite well distributed over the whole area and ranges from 6 to 30 inches on the stump. The thickest and most uniform timber is along the Sturgeon and the Obabika Rivers.

A considerable portion of this area has been prospected over, but I did not notice a single survey line of any mineral claims.

Of large game, moose and bear are quite plentiful and several were seen by members of the party. There are a few red or fallow deer, while partridge, duck, beaver, rabbits and muskrats are numerous. Trout, black bass and pike were caught in nearly all the lakes and streams. There were scarcely any berries of any kind found during the summer.

I completed the survey on the evening of October 12th, and arrived home on the evening of October 15th.

Accompanying this report you will find a plan on the scale of 1 mile to 1 inch, field notes, chainer's oaths, and accounts in triplicate.

All of which is respectfully submitted.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) J. J. NEWMAN.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 19.

Survey of Base and Meridian Lines in the Temagami Forest Reserve, District of Nipissing.

ALVINSTON, ONT., Nov. 22nd, 1910.

SIR,—I beg to submit the following report on the survey of base and meridian lines in the Temagami Forest Reserve, in the District of Nipissing made under instructions from your Department and dated May 17th, 1910.

On 22nd July, I proceeded to Sudbury and after arranging for teaming supplies and engaging men I proceeded to Wahnapitae Lake, and from there northerly by canoe to Lake Chinicoochichi. The return was made to Sturgeon Falls

down Sturgeon River.

The survey as shown on the accompanying plan and field notes was commenced at the north west angle of Mackelcan, where after waiting two days for an observation I produced the line between the Townships of Aylmer and Mackelcan, but succeeded in getting an observation at 73 chains from the north boundary of Mackelcan. This meridian was run north for a distance of eighteen miles and at the 6th, 12th and 18th mile posts the base lines were run east and west therefrom. The second meridian line was however run south. All observations were made from Polaris at elongation and are shown in the field notes accompanying this report. The plan shows the location of the lines and the approximate waterways.

The magnetic variation runs from 4½ to 8½ degrees west and is not at all

constant.

Twelve iron posts were planted and marked as shown in the field notes, and at the head of each mile a wooden post was planted, except where the end of a mile came in water when a witness post was put in marked with the proper chainage.

GENERAL FEATURES AND SOIL.

The country is in general of a rolling character and is sometimes broken sharply by rocky hills and cliffs. Many lakes occur and the character of country near the lakes is nearly always rocky. A few narrow muskegs occur. The Sturgeon River might be said to mark the divide of country with regard to timber and somewhat with regard to soil. It is a rough broken stream with a very small flow at low water. Numerous expansions occur.

Travel in any direction almost, can be made over the lakes. The portages are well cut out where travelled.

There are a few burnt areas but such are small. Some brulé occurs as well.

The soil is of a sandy nature and not of great depth. The country can never be termed "agricultural" for where the soil is not underlaid with rock about three or four inches from the surface, the land is full of boulders and stones. The timber is however valuable, and there are numerous seams of white quartz and some indications of mineral.

There are numerous small falls and rapids on the Sturgeon River, but the flow is very small at low water.

TIMBER.

Nearly the whole area is covered with a growth of red and white pine, jack pine, birch, poplar, spruce and cedar and the forest is as a rule thick.

The pine is more plentiful south of the Sturgeon River than on the north side, and runs from ten to thirty inches in diameter. Some of the larger pine is beginning to rot at the centre and it might be wise to cut some of the full grown trees.

The timber might be driven down the Sturgeon River in freshet. There is a small area of good sound pine at the south-east angle of McConnell, recently burned,

which should be got out before it becomes wormy.

The other timber averages from four to eighteen inches and is in a good state of preservation. The necessity for efficient rangers in this territory is very apparent.

FISH AND GAME.

The fishing in these waters is unequalled. Pike, pickerel, bass and lake trout are easily caught with the troll and some of the fish are exceptionally large.

Red deer, moose and bear were seen, and plenty of muskrat and a few signs of

beaver. -

Accompanying this report I submit,

(1) A general plan,

(2) Field notes of the survey with index map.

All of which is respectifully submitted.

I have the honor to be,

Sir.

Your obedient servant,

(Sgd.) A. S. Code, C.E. Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 20.

SURVEY OF BASE AND MERIDIAN LINES, DISTRICT OF ALGOMA.

TORONTO, 15th December, 1910.

SIR,—We have the honour to submit the following report upon the survey of certain meridian and base lines in the District of Algoma, north of Missanabie Lake, made by us under instructions from your Department dated 2nd May, 1910.

Leaving Toronto on 25th May, with four men we proceeded to Missanabie Station on the Canadian Pacific Railway, where by previous arrangement we were joined by fourteen others from Sudbury, Chapleau, Heron Bay and other points in New Ontario.

At Missanabie it was discovered that one of the Toronto men had a diseased foot, and he was obliged to return to his home. The total number of men employed during the season was thirty-seven, although the maximum force at any given time was twenty-two. The party was in charge of T. B. Speight, O.L.S.. assisted by John Van Nostrand, O.L.S.

We left Missanabie on 28th May with twenty men, five canoes and about two tons of supplies and equipment, and travelled by way of Dog Lake, Crooked Lake and Missanabie Lake, to the point where the latter is crossed by O.L.S. Niven's base line run in 1899. This journey of about thirty-five miles occupied two days and the only difficulty of importance met with was the rounding of Fairy Point, where the prevalence of rough water is usually a source of danger to canoemen.

We began the work on 1st June, by re-tracing and opening out the Niven base line for a distance of nearly two and a half miles east from lake, arriving at the one hundred and eighth mile post after two days of work in rain, chiefly through brulé which in places had obliterated all marks of the original survey. This point, the initial point of the survey, was found to be marked by an iron post planted alongside a tamarac post, the position being further identified by a spruce "bearing tree" six inches in diameter, north ten degrees, east ten links from the posts. This part of the base line being well defined and the weather too cloudy for astronomical work, the required angle was turned off from the base line and we ran due north three and a half miles, at which point the first observation was obtained and the line found to be within one minute of a true meridian. The line was then continued due north to the 24th mile post at which point we ran due west fortyeight chains to tie in the Missanabie River. We then continued the main meridian line due north to the 42nd mile post and from that point started a base line to the east, for the purpose of connecting with the Missanabie River. owing to the danger from forest fires and scarcity of water, which the long continued drought had produced, we continued this base line east to the 9th mile post, but failed to reach Opazatika Lake in that distance.

On 30th June, the second day east from the meridian, a sad casualty occurred. Alan C. Henderson, a bright young student from Toronto University, succumbed to the intense heat, combined with drinking impure water from icy muskegs. He became faint while returning with his chaining mate from the day's work about 5.45 p.m. and was unable to proceed further. His companion took the news to camp and refreshment was at once sent out to him as it was thought to be a case of exhaustion only. On the arrival of the relief party he was found to be unconscious, and in spite of all that could be done the unfortunate young man expired about midnight. Early the next morning a picked crew of seven men carried the body to the canoe route and reached Missanabic in three days of forced travelling and, with as little delay as could be, brought the remains to Toronto for interment.

The effect of this calamity upon the superstitious Indians who largely composed the party, was such that eight expressed a desire to quit work and for the same reason it was found very difficult to get others to take their places.

The survey proceeded slowly for the next fortnight when the party received sufficient reinforcement to be able to make good headway, but the continued dry weather which lasted for seven weeks made it all-important to keep within reach of a body of water, sufficient for protection as well as for actual subsistence. The narrow escape made by our party in the season of 1908, from a fire started by prospectors, had shown the necessity for caution of this nature, and the most vigilant care was taken to see that every camp fire was quite dead before a camp ground was left. To the above causes the deviation from the written instructions is chiefly due.

From the 42nd mile post the meridian line was continued north to the 60th mile post, from which point base lines were run nine miles east and west respectively.

The meridian line was then continued to the south boundary of the Township of Staunton, a total length of sixty-nine miles six chains and thirty-two links, the intersection with that boundary being made at a point five chains and seventy-four links west from the south-east angle of lot 21 in concession 1.

Returning to the 51st mile post we ran east, sixteen miles and thirty-three chains, to the Opazatika River.

We next continued this base line west from the meridian for a distance of twenty-seven miles at which point we ran meridians three miles and thirty chains north to a small river, also nine and a half miles south in the hope of connecting with the located line of the Canadian Northern Railway, but owing to a deflection in that line, as we afterwards learned, we failed to reach it.

From the 27th mile post on this base line we continued it west, a total distance of thirty-seven miles six chains and forty-three links, from the main meridian line to the Kabinakagami River and terminated the work for the season.

All lines run were well opened out and blazed in the regulation manner. Iron posts were planted at the 6th, 15th, 24th, 33rd, 42nd, 51st and 60th miles on the main meridian line, and at each 9th mile on other meridian and base lines. The north end of the main meridian was marked by an iron post at its intersection with the south boundary of the Township of Staunton. With the exception of those at the 6th and 15th miles on the main meridian line all these posts were two inches in diameter, 3 feet long, forged at the top, pointed at the bottom and painted red. In the two exceptions above mentioned, the iron posts were one and one-quarter inches in diameter. In addition to the iron posts planted as above described, a wooden post of the most durable material within reasonable distance was planted at the end of each mile. On each wooden post and iron post the number of the mile it represented was carefully and durably marked on the side nearest the initial point of the line. Where a corner occurred in a lake or other natural feature precluding the planting of posts, the post was planted upon the nearest suitable point of land and upon the line run, the distance of such post from the true corner being entered in the notes and marked upon the post. where wooden and iron posts are planted side by side, the iron post indicates the proper corner.

Frequent astronomical observations, records of a number of which are appended, were taken for the purpose of verifying the course of the lines run, the average magnetic declination being about five degrees west.

The return journey was made by way of Oba River and Lake, Wabatongashene Lake to Dog Lake and thence to Missanabie Station which was reached on 5th September.

GENERAL FEATURES.

The country embraced by this survey comprises the hitherto unexplored territory bounded on the south by the Canadian Pacific Railway, on the north by the National Transcontinental Railway, on the east by the Opazatika and Missanabie Rivers and on the west by the Oba and Kabinakagami Rivers. On the whole the surface may be termed rolling, the only elevations of note being two or three hills about ten miles west of the 50th mile post on the main meridian. These rise to a height of about two hundred feet above the surrounding country.

The other elevations shown by the accompanying plan and field notes vary from ten to thirty feet, with an occasional one of fifty feet.

In addition to the rivers above named the Mattawitchewan, or Albany Branch, crosses the main Base Line about twenty miles west of the main Meridian Line, and flowing north-easterly, enters the Missanable River about one mile west of the 64th mile post on that Meridian.

The lakes include Missanable, Brunswick, Opazatika, Oba and Kabinakagami,

with a fair number of smaller lakes of minor importance.

In the valley of the Missanabie River, the soil is generally clay and clay loam with occasional sandy and rocky ridges, Along the main Base Line the soil is of less value for agricultural purposes. The valleys of the other rivers have a smaller percentage of clay than that of the Missanabie. Laurentian and Huronian alternately compose the formation met with.

The ravages of fire of recent date are not much in evidence, but from indications we believe that nearly the whole of this region was fire swept some fifty or sixty years ago with the result that the present timber is largely second

growth.

Soil.

Along the main Meridian Line we found clay and clay loam predominating, the northern thirty miles in particular being of excellent quality. Allowing for sandy ridges and occasional outcroppings of rock, sixty-five to seventy-five per cent. can be classed as good agricultural land. On the Base Line which passes through the 60th mile post nearly the whole is first class soil. Along the main Base Line west from the main Meridian, the clay appears in smaller areas, interspersed with rocky and sandy ridges, and only about thirty per cent. may be termed good farming land.

TIMBER.

Spruce, poplar, Banksian pine, white birch, balm of Gilead, tamarac, balsam and cedar, in about the above order of predominance, compose the timber met with, the largest specimens being in the valleys of the Missanabie and other rivers. As is characteristic of the clay belt, the timber remote from the river is less rapid in growth. Although no great quantity is at present of marketable size, there is sufficient for the ordinary uses of the settler. These conditions are general and vary but slightly. The best specimens of poplar were seen on the east and west shores of Brunswick Lake, and of spruce and Banksian pine, in the valley of the Missanabie.

MINERALS.

As before intimated, the Laurentian and Huronian formations were met with alternately, and in the latter, some promising outcroppings of diorite and diabase in the 52nd and 53rd miles on the main Meridian Line were noticed, but we saw no actual indications of the precious minerals. Indications of iron ore were seen on the south-east bay of Brunswick Lake.

WATER POWERS.

Taking the rivers concerned, in order from the east, the Opazatika has numerous falls and rapids from ten to fifteen feet which are capable of development for local purposes.

5 L.M.

The breadth of this stream varies from one hundred to two hundred feet, depth four to six feet with generally fair current and banks about eight to ten feet in height. Opazatika Lake, with an area of about twenty-five square miles, would serve as a natural reservoir, but its low shores and numerous islands would suffer if an attempt were made to increase to any considerable extent the natural elevation of the water.

Missanabie River has a breadth ranging from three hundred to five hundred feet with depth about ten feet. Its current in general is about one and a half to two miles an hour, with the exception of a stretch of about fifteen miles of what is known as "swampy ground," where the flow is almost imperceptible. The banks are usually about ten feet high, although in some places they attain forty to fifty feet. The Lake of the same name covers about fifty square miles, its extreme length being twenty-six miles. Its shores are chiefly rocky, rising gradually, and capable of an elevation of water to four or five feet without causing much flooding. Brunswick Lake, a fine sheet of water with extreme length of fourteen miles and breadth of one-half to two miles, covers an area of about twenty square miles, and is dotted with islands. Its shores are generally rocky with gradual slope, but along the south-west bay are low lying. Brunswick River, which flows from this lake, has an average width of about one hundred feet and depth eight to ten feet. The current is generally slow, but in the three miles above its junction with the Missanabie River rapids and falls amounting to about twenty feet would furnish a fair water power proposition. The ruins of the old Hudson's Bay Company's Brunswick House Post on the west shore of the lake of that name are still to be seen about three miles south from the mouth of the river. Chief amongst the falls and rapids on the Missanabie, within the scope of this survey are Island Falls, with a head of ten feet, about one mile east of the 16th mile post on the main Meridian Line; Green Hill Portage occurring at the 19th mile post, has a rapid about one mile in length with a total descent of twenty to thirty feet; St. Peter's or Split Rock Falls, situated about one mile west of the 23rd mile post, with a fall of twelve feet, and St. Paul's Falls, about four miles east of the 28th mile post, with a head of twenty feet.

Mattawitchewan, or Albany Branch, River, from one hundred to two hundred feet in width and four to six feet in depth has, as indicated by its Indian name, numerous minor falls and rapids. A unique feature of this stream is that its source is the Oba River, the divided waters of which flow in opposite directions from this source. The located line of the Canadian Northern Railway crosses the smaller stream near this intersecting point. The shores of the Mattawitchewan

are low lying, but no lake expansions occur.

The Oba River is a stream about two hundred feet wide and six to eight feet deep with banks generally about eight feet high and fair current. A considerable number of small falls were noted. With Oba Lake as a reservoir, some eleven square miles in extent, those in the upper part can be utilized. The lake contains numerous islands and is flanked on the north-west by a range of hills which add to its beauty. At the source of the Mattawitchewan, the Oba, as before noted, yields a part of its waters to the former, the remainder flowing south-westerly to form the chief tributary of the Kabinakagami.

The Kabinakagami River on the western verge of this survey is a stream differing little from the Oba, has falls and portages very similar to those above described and is regulated in its flow by Kabinakagami Lake, with an area of

about thirty square miles, and containing many islands.

An important feature in all these rivers is the existence of the large lakes mentioned, which add very materially to the value of the water powers by insuring, in great measure, a uniform flow of water.

GAME.

Moose were numerous, but no red deer were seen. Bears were plentiful and on more than one occasion took advantage of want of care in protecting provisions. Indications of beaver were seen in numbers of places. Mink and marten also were noticed. Partridge are to be found in considerable numbers. Grey trout abound in the larger lakes and attain a great size. In the streams, particularly in the Mattawitchewan, Coat and Oba Rivers, speckled trout are abundant.

GENERAL REMARKS.

Nearly the whole of the territory embraced by this survey lies within the clay belt and the greater part, particularly in the valleys of the Missanabie and Kabinakagami, will be available for farm land when the transport facilities warrant settlement.

In this connection the National Transcontinental Railway will be opened during the coming summer; the Canadian Northern Railway, which crosses the territory diagonally in a north-westerly direction about midway between the Canadian Pacific and National Transcontinental Railways, will be under construction as early as the opening of Spring will permit, and the Algoma Central has projected a line down the Oba and Kabinakagami Valleys to connect with the National Transcontinental Railway, with the estimate that this link will be completed during the next two or three years.

In work of this kind the surveyor finds it impossible to obtain information sufficient to arrive at any reliable conclusion as to the mineral possibilities. Outcroppings of rock were seen at intervals as already noted, and it may well be that these are deserving of the attention of expert prospectors.

The fact that the several railways mentioned are about to give easy access to a large part of this region should within a few years throw it open to the settler.

The abundance of wild fruits and the success with which vegetables are grown at Brunswick House Post, together with our own observations of the climatic conditions in the clay belt during the past ten years, convince us that there is a great agricultural future before this part of Ontario.

Accompanying this Report are a general plan, field notes and triplicate account.

We have the honour to be,

Sir.

Your obedient servants,

(Sgd.) Speight & Van Nostrand. Ontario Land Surveyors.

The Honourable The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 21.

SURVEY OF TOWNSHIP OUTLINES IN THE DISTRICT OF SUDBURY.

THESSALON, Nov. 22nd, 1911.

SIR,—In accordance with your instructions dated May 4th, 1911, I have made a survey of certain Township Outlines northwest of the Mississaga Forest Reserve, and beg to submit the following report:

The best route to this territory is via the Montreal River from the Algoma Central Railway.

I commenced the survey by running a base line east from a point 21.94 chains south of the 43rd mile post on the meridian line run in 1898 by T. B. Speight, O.L.S. This base line was run due east a distance of 12 miles and forms the north boundary of Range 16. The north boundary of Township 9 H., which is a continuation of this base line, was run later in the season. I returned to the northeast corner of Township 23, Range 16, which point is exactly 6 miles east of the starting point on O.L.S. Speight's meridian, and ran north astronomically a distance of 5 miles 20.40 chains, at which point this line was intersected later in the season by the north boundary of Range 17. Returning to the northeast corner of Township 23, Range 16, I ran south astronomically between Townships 23 and 22, Range 16, a distance of 6 miles, to the south-east corner of Township 23, Range 16. From this point I ran west astronomically a distance of 6 miles 1.13 chains, at which point I intersected the meridian line run by O.L.S. Speight in 1898, at a point 22.95 chains south of the 37th mile post. I returned to the south east corner of Township 23, Range 16, and ran south astronomically between Townships 23 and 22, Range 15, a distance of 5 miles 78.77 chains to the base line run by myself in 1908, which was intersected at a point 2.49 chains east of the 18th mile post. Returning again to the south-east corner of Township 23, Range 16, I ran east astronomically a distance of 6 miles to the south-east corner of Township 22, Range 16. From this point I continued this line east astronomically between Township 8 H. and Township 9 H., a distance of 5 miles 73.47 chains, at which point I intersected a meridian line run during this season at a point 12.35 chains south of an iron post marked 8 G., on the south-east side and 9 G. on the north-east side. I then returned to the southeast corner of Township 22, Range 16, and ran south astronomically between Township 22, Range 15, and Township 8 H., a distance of 5 miles 77.05 chains to the base line run by myself in 1908, which was intersected at a point 1.65 chains east of the 12th mile post, this mile post being the north-west corner of the Mississaga Forest Reserve. I returned to the south east corner of Township 22, Range 16 and ran north astronomically a distance of 6 miles to the south-east corner of Townshipp 22, Range 17. From this point I ran east astronomically between Township 9 H., and Township 10 H., a distance of 5 miles 68.80 chains, at which point I intersected a line run this season at a point 12.45 chains south of an iron post marked Township 10 G., on the south-east side. I returned to the south-east corner of Township 22, Range 17, and ran north astronomically between Township 22, Range 17 and Township 10 H., a distance of 5 miles 21.94 chains, to the south-east corner of Township 22, Range 17. From this point 1 ran east astronomically between Township 10 H. and Township 11 H., a distance of 6 miles.

I returned to the north-east corner of Township 22, Range 17, and ran west astronomically a distance of 5 miles 78.95 chains to the east boundary of Township 23, Range 17, which I intersected at a point 20.40 chains north of the 5 mile post, as previously mentioned in this report. From this point I continued due west astronomically a distance of 5 miles 77.17 chains, at which point I intersected the meridian line run in 1898 by O.L.S. Speight, at a point 3.05 chains south of the 48th mile post. In running the last line I intersected the lines run by Messrs. Lang and Ross, Ontario Land Surveyors, during this season, and moved their posts to the points where my line intersected theirs. The points where these posts were planted are shown in my field notes, and in accordance with your request, I have supplied Messrs. Lang and Ross, O.L.S., with the information necessary to complete their returns.

Throughout the survey the lines were carefully run and are well cut out and blazed. The posts are all of the best timber available, and stone mounds were built around the posts wherever possible. Some of these mounds are large enough to form permanent monuments for all time.

An iron post was planted at each township corner and marked with the number of the adjoining township on the side facing the township. The iron post at the south-east corner of Township 9 H. was not marked owing to an oversight. It is planted, however, in a good mound of large stones.

Astronomical observations were taken very frequently and the details are shown in the field notes at the points where the observations were taken. In running these lines I used a transit with an object glass large enough to take observations on Polaris in the day-time. I also carried a first-class sidereal watch which I checked at every possible opportunity. By this means I was able to take an observation every clear day, while the work was actually in progress, instead of having to wait for an elongation of the star at night.

The territory lying within the limits of the survey is practically a virgin forest. I do not think that five per cent. of the total area has been burnt. There is an area of brulé extending for some distance along the east bank of the Montreal River, and running back for a mile or more. An area of perhaps three or four square miles has been burnt some years ago near the Batchewana River in Townships 22 and 23, Range 16. There are also a few small burnt areas here and there, which have apparently been caused by lightning, as they are all far removed from any travelled route and do not in any case cover more than a few acres. There is also some brulé of recent date along the north boundary of Townships 23, Range 17.

The timber throughout is a mixed growth of spruce, balsam, white birch, jack pine and white pine. There is more or less white pine of good quality scattered over the whole area and in many places grows very thickly. This pine occurs mostly in bunches among other timber, but the total amount within the area covered by the survey is very large. There is also a large quantity of splendid spruce along the Batchewana River in Township 22, Ranges 15 and 16. There is a large quantity of fine jack pine suitable for railway ties.

These townships are close to the Montreal River, which is the most important stream, and flows along the west boundary of Township 23, Range 17, and part of Range 16. There are several falls on the Montreal River which would make good water powers. One in particular occurs about a mile south of the north-west corner of Township 23, Range 16. In half a mile, the river falls at least one hundred feet and probably more. This falls is partly east and partly west of

O.L.S. Speight's meridian line. A branch of the Montreal River flows through Townships 22 and 23, Range 16, and part of Townships 9 H. and 10 H. This is a rough stream, but with some improvements could be used for timber driving purposes. It is navigable for canoes across Township 23 and most of Township 22, but there are a number of portages to be made. The Batchewana River flows through the southern part of this territory, and is also a stream suitable for timber driving with some improvements. The Goulais River rises in Township 8 H. but is a small stream, being very near the source.

The country as a whole, is rough and hilly, and in some places almost mountainous. The soil is mostly sand and gravel, and in my opinion is not

suitable for agriculture.

The geological formation is principally granite, but a large area of Huronian rocks occurs along the Batchewana River, which might yield results if carefully prospected. No indications of economic minerals were seen.

The magnetic variation averages about 3° 45' west, but is very inconstant, variations of a degree or more being so frequently observed as to make it useless to attempt to keep a record of them. When the local attraction is very large the fact has been recorded in the field notes.

Moose are fairly plentiful and there are some deer. Wolves were heard occasionally. The partridge are becoming very plentiful after having almost disappeared. The ordinary fur-bearing animals appear to be fairly plentiful.

In the Montreal River large pike were caught with a troll, while in the

Batchewana River some fine speckled trout were caught.

Enclosed herewith are field notes, plan, timber plan on tracing linen and accounts in triplicate.

I have the honor to be,

Sir,

Your obedient servant, (Signed) James S. Dobie.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 22.

SURVEY OF TOWNSHIP OUTLINES, DISTRICT OF SUDBURY.

NEW LISKEARD, ONT., Oct. 10, 1911.

SIR,—I beg to submit the following report on the survey of Township Outlines in the District of Sudbury, north-west of Porcupine, performed under instructions dated May 17th, 1911.

I went into the country by the Kamiskotia River, which, while navigable, has many short rapids and log jams.

Owing to its being almost unnavigable through the Township of Massey, I was forced to commence work at O.L.S. Niven's XVIII mile post on his second

base line, or at the north-west corner of the Township of Turnbull. From here I ran south and north to the north-east corner of Whitesides and south-west corner of Kingsmill, respectively, a distance of thirty (30) miles.

The southerly three and one-quarter (3½) miles of the west boundary of Byers, or Niven's second meridian line, was run and produced twelve miles to the

south-west corner of the Township of Massey.

From the north-west corner of the Township of Robb, which is also the north-east corner of Coté, base lines were run east and west astronomically, a distance of six miles each way.

Similar base lines were run from the north-west corner of the Township of

Thorburn.

The above lines were well opened up and the adjacent trees well blazed in the usual manner, while wooden posts of durable material were planted at every mile and half-mile; and where such distance came in a lake or river, a post was planted on the shore nearest the said distance, with the chainage carved on the proper face. On nearly all the lakes and larger rivers, posts were planted on the banks with the chainage carved thereon for the benefit of surveyors and prospectors in making a tie. The posts were planted as solidly as possible, and, where possible and necessary, a cairn of stones were built around them.

Iron posts of 1½ inches were planted at the following points: south-west corner of township of Turnbull; north-west and north-east corners of township of Robb; north-west and south-west corners of township of Coté; south-west corner of township of Massey; north-west and south-east corners of township of

Geary and north-west and north-east corners of township of Moberly.

The names of the townships were cut with a cold chisel on all of those iron posts, and the wooden posts at the same points were carved similarly with a scribe. No iron post was planted at the north-west corner of township of Loveland,

which said point falls in the north branch of the Kamiskotia River.

Observations on Polaris were taken every six miles, and where possible, every three, for the purpose of keeping the lines astronomically correct; and magnetic variation was noted at these points as well as others where a change of variation took place. The variation ranges between six degrees and ten degrees west; the results being entered in the field notes.

The chain bearers were duly impressed throughout the survey with the necessity of accurate chainage and taking careful field notes so that the natural

features, variety of soil and timber would be plainly shown.

During the months of June and July, forest fires were prevalent in the Townships of Massey, Turnbull, Robb, Coté, Loveland and Byers. The cause, I think, was mainly through prospectors neglecting to extinguish their fires before leaving a camp. There were quite a number of prospectors in these said townships, prospecting for gold, and several good finds were made in Turnbull, Robb, Loveland and Byers.

I had the misfortune to suffer rather heavily through the fires, being burned out twice, and having to take to the river with all our provisions and camp.

Soil.

The whole country may be termed low and flat, a large portion of it being rather swampy, though in the townships of Massey and Turnbull there is higher ground, there being many sand ridges. Throughout the northern townships, however, clay loam is found everywhere with ridges of sand occasionally cropping

up and in some places in the swamp, sand exists under the muck, instead of clay. If properly drained, this would be valuable agricultural land. There are no settlers in this district at all, though much trapping is done by the Indians and trappers. The four northern townships, Wilhemina, Geary, Moberly and Thorburn are very low, level land.

Rock.

Rock occurs only in the southerly six townships and generally in low ridges and domes, rising out of low ground. It consists principally of porphyry, granite, diabase and schist. The schist occurs in narrow dykes of about one hundred to two hundred feet in width, and only three such dykes were found on the westerly boundary of Coté and Massey.

In Turnbull and Robb, where many claims are staked, the formation is a

quartz porphyry changing to a diabase.

In the Township of Loveland, higher ridges of rock occur along the banks of the Kamiskotia, being in some places two hundred feet in height.

Another year will show the value of mineral in these townships if it exists.

TIMBER.

The entire townships are covered with pulpwood, with occasional good ridges of jack-pine in Massey, Turnbull and Robb. The ridges follow the course of the river to quite an extent. The timber in the northern six townships consists of spruce, balsam, birch, cedar and dead tamarac, to about fifteen inches in diameter. A noticeable feature throughout is the growth of young tamarac, being quite thick in several places. No white or red pine was seen at all. Old and new brulé follows the course of the river and across the Township of Turnbull.

WATER-POWER.

Only one water power of any size exists. This is in the Township of Coté on the Kamiskotia River about three hundred feet north of the boundary line, where a natural head of about twenty-five feet is obtained. A raise of ten feet by a dam would possibly give 1,000 H.P., though in a dry season this would be considerably diminished. In view of the fact that Porcupine and Cripple Creek are so close, this power may be of some value.

Accompanying this report is a general plan on a scale of one mile to an inch, a timber plan on same scale, field notes, oath of chainmen, and all other

necessary documents, all of which are respectfully submitted.

I have the honor to be,

Sir.

Your obedient servant,

(Sgd.) W. J. Johnston.

The Honourable, The Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 23.

SURVEY OF TOWNSHIP OUTLINES, DISTRICT OF SUDBURY.

LITTLE CURRENT, ONT., Sept. 15, 1911.

SIR,—I have the honour to submit to you the following report on the Survey of Township Outlines in the District of Sudbury, under instructions from your Department dated May 8th, 1911.

After procuring my outfit, provisions and guides from Biscotasing, I proceeded by way of the canoe route from Old Wakami, mileage 94, west of Cartier, on the Canadian Pacific Railway, through Wakamagaming and Kebsquasheshing Lakes and River to Wenebegon Lake. I returned the same way as far as Wakamagaming Lake, where I turned to the route to Ridout Station, as a train at Old Wakami cannot be flagged. The fire rangers at Wakamagaming Lake have cut out the old portage to Ridout, making it much easier to travel.

I commenced the work where I had last year planted an iron post at the north-east angle of 8 D, about 70 chains south of Lake Wenebegon, and ran the first base line west astronomically 24 miles, between Townships 8 D and 9 D, 8 E

and 9 E, 8 F and 9 F and 8 G and 9 G.

The first 3 miles, on account of a difficulty in obtaining my latitude, is some minutes astray, as recorded in the notes and plan.

At intervals of 6 miles on above base, I ran north 6 miles, and south 6 miles and a fraction to O.L.S. Dobie's Base Line, numbering each meridian, reckoning from the east, as 1st, 2nd, 3rd and 4th.

After running north from the 1st base on the 4th meridian, I ran east astronomically, the 2nd base along the north limits of 9 G, 9 F, 9 E and 9 D, 23 miles and about 11 chains to Wenebegon Lake. Where the meridians intersected this base, I planted the posts for the corners of the several townships.

At every mile a wooden post was planted and marked in Roman numerals, cut in the post, the mileage, which on the base lines was reckoned from the north-east angle of the township, and on the meridians it was reckoned from the south-west angle.

At every township corner, an iron post, of 11/4 inch pipe, was also planted and marked thereon with a cold chisel the adjacent township numbers. exception to this is at the north-east angle of 9 G, where, on account of the packers having mislaid for a time one of the posts, no iron post was planted, but a large cairn of boulders was built around the wooden one. At every mile, where loose stone could be found convenient, a cairn was built around the post and noted.

On the wooden posts at township corners were marked the numbers of the adjacent townships only.

Where a mile post or township corner came in a lake or river, a witness post was planted on the nearest shore, and cut thereon the mileage and chains. bearing trees were marked and noted at each post, except in a few places where there was no timber.

All lines were run with a Solar compass, well adjusted and well cut out and blazed, the blazes being on the sides of the trees facing the line, also on the sides facing the direction of the line.

The timber throughout the tract surveyed is white birch, poplar, balsam, black and white spruce, jack pine and white pine, cedar, and in a few places sugar maple and black birch. Tamarac is growing again, though still very small.

The 1st base, along north limits of 8 D, 8 E, and 41/2 miles of 8 F, runs mostly through an old brulé, the timber being 3 to 8 inches in diameter. balance of the base, 1½ miles along north limit of 8 F, and continuing along north limit of 8 G, is in big timber, the white pine being mostly scattered. In the old brulé there are also some clumps of large white pine.

On the 2nd base, from Wenebegon Lake west to 5th mile post, Township 9 D, there is considerable large black spruce and jack pine. The remainder of this base runs through alternate old and new brulé and old bush past the 2-mile post on north limit of 9 G, where it enters solid green bush of large timber, including considerable jack pine, and continues in this the remainder of the base.

On the 1st meridian, nearly all the limit between 8 D and 8 E is in large timber. The limit between 9 D and 9 E is mostly in old brulé, with timber from 3 in. to 8 in. in diameter.

On the 2nd meridian, the limit between 8 E and 8 F is also nearly all in large timber, and the remainder between 9 E and 9 F, for 4½ miles, is in old brulé with small timber. The other 1½ miles, to the 2nd Base, is in large timber.

On the 3rd meridian, between 8 F and 8 G, the first 2½ miles, going north, is in large timber, the remainder, 31/2 miles to the 1st Base, is alternate old brulé and heavy timber. For 5 miles, in going north on this meridian between 9 F and 9 G, the line is in large timber, the 6th mile being new brulé with no timber of any value.

On the 4th meridian, the first 21/2 miles, in going north along west limit of 8 G, is in old brulé, with timber from 3 to 8 inches. The remainder of the meridian, 9½ miles to north-west corner of 9 G, is in large timber.

From the considerable amount of large white pine found along the limits between 8 D and 8 E, 8 E and 8 F, and 8 F and 8 G, it is probable that the southern portions of 8 D, 8 E, 8 F, and the south-east of 8 G, contain a considerable quantity of it. There appears to be also a considerable amount of white pine in the north-west portion of 8 G. In travelling along Wenebegon Lake, a considerable amount of it was also seen along the west shore.

I have shown, in dark green, on the timber map, where white pine was seen. In some places it is scattered. In the scattered pine a great deal of it is apparently unsound, owing probably to its great age.

All the land is a rich sandy loam. Along the north limit of 9 E and west part of north limit of 9 D, and as far north as the canoe route to the north of those townships, a distance of from two to four miles, as shown on the plan, and probably still further north, the country is comparatively free from rock and boulders, and fairly well suited for farming. The line between 9 D and 9 E also runs through some similar land.

The balance of the country is broken with ridges of granite rock and

boulders, mostly red granite.

The country generally is rolling with hills from 60 to 200 feet high. A great deal of the country along the 2nd base is fairly level.

There were no indications of mineral, except some small showings of iron pyrites.

The magnetic variation was fairly steady. The mean variation of a great number of readings is 4° 30' west.

Great care was taken to impress on every member of the party the necessity

of thoroughly extinguishing all fires.

We used the canoe route which follows up the stream west from the north end of Wenebegon Lake to Waboose Lake, and from there into the east branch of the Aubinadong River, to the south west angle of 9 E. After about August 1st, the water in the creek flowing east out of Waboose Lake, as far as the first lake, a part of the said route becomes very shallow and makes it tedious in transporting big loads.

There does not appear to be any large water powers in the tract surveyed. The

rapids on the streams give very little fall.

The only fish that we caught were pike.

There are moose, deer, wolves, bear, beaver, and the smaller fur-bearing animals, and partridge and duck in the tract.

Accompanying this report I have transmitted the plan, field notes, timber

map and accounts in triplicate.

I have the honour to be,

Sir,

Your obedient servant,

(Sgd.) T. J. PATTEN, Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto.

Appendix No. 24.

SURVEY OF OUTLINES OF TOWNSHIPS, DISTRICT OF SUDBURY.

SAULT STE. MARIE, ONT., November 4th, 1911.

SIR,—We have the honor to submit the following report on the survey of certain township outlines in the Sault Ste. Marie Mining Division, in the District of Sudbury and Province of Ontario, made by us under instructions from your Department dated May 5th, 1911. The survey was commenced early in May and completed early in July.

Our first base line was run due east astronomcially 17 miles, 73 chains and

65 links from the 66th mile post on O.L.S. Speight's meridian line.

Our second base line was run due east astronomically 17 miles and 1

Our second base line was run due east astronomically 17 miles and 76 chains from the 60th mile post on O.L.S. Speight's meridian line.

Our first meridian line was run from the mile post on our second base line 6 miles east of O.L.S. Speight's meridian line due north 5 miles, 76 chains and 65 links and continued due south 12 miles.

Our second meridian line was run from a point in our second base line 11 miles and 76 chains and due east of O.L.S. Speight's meridian line, north astronomically 5 miles, 78 chains and 56 links and continued south astronomically 12 miles.

Our third base line was run from a post in our first meridian line 6 miles south of our second base line and due west astronomically 6 miles, 4 chains and 35 links of O.L.S. Speight's meridian line and continued east astronomically 11 miles 74 chains and 20 links.

We found it necessary to run the third base line from the point above mentioned, as we were unable to find the 54th mile post on O.L.S. Speight's meridian line. The entire neighborhood of this post has been swept by fire and the burnt trees all blown down. We intersected O.L.S. Speight's meridian line 7 links north of the 54th mile post.

PHYSICAL FEATURES.

The entire area which we covered with these lines is very similar in its topography. For the most part it is made up of high sand and gravel hills of glacial origin with intervening swamps and muskegs. These ranges of hills run for the most part in northwesterly and southeasterly directions. Such rock exposures as we encountered were granite, with the exception of a few outcroppings of diabase on our second meridian between Township 22, Range 18 and Township 11 H. There was no evidence of prospectors or lumbermen in the district, possibly on account of the difficulty of access.

TIMBER.

The timber which we encountered was for the most part spruce and white birch. On some of the ridges and sand plains we encountered groves of jack pine. The entire area is heavily timbered, accompanied by a dense undergrowth of alder and moose maple. The only stand of timber of commercial value which we discovered, is in the neighborhood of Pine Lake in Township 22, Range 8, and Township 11 H. On the shores of this winding lake there is a stand of white pine of considerable extent. The trees average at least 30 inches in diameter and are sound to the core, and extend as far as the eye can reach from the shores of this lake. There are practically no other trees in this vicinity than the white and red pine.

WATERS.

There is only one waterway worthy of mention, viz.: the Montreal River. It rises in a lake in Township 12 H and flows as a small and shallow stream in a southwesterly direction and does not become navigable even for canoes until it crosses our second meridian line. From this point southward it is easily navigable at all times in the open season. It flows through a great many small lake expansions in its course. In Township 23, Range 19, it is joined by a tributary from the northwest which passes O.L.S. Speight's meridian line a few chains south of the 60th mile post. This branch is a swift small stream winding through a swampy valley. There is, however, at all seasons of the year sufficient water flowing in it to carry canoes. We crossed numerous small lakes on the various lines, but none of them are worthy of mention.

FISH AND GAME.

The rivers and lakes, both large and small, abound in pickerel, pike and perch. To our knowledge these are the only fish in the waters of the District. There are great numbers of moose and a few red deer.

Accompanying this report, we submit plans and field notes and also accounts in triplicate.

We have the honor to be,

Sir,

Your obedient servants,

(Signed) LANG & Ross, Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ontario.

Appendix No. 25.

SURVEYS OF OUTLINES OF TOWNSHIPS, DISTRICT OF SUDBURY.

ORILLIA, OCTOBER 17th, 1911.

SIR,—In compliance with instructions received from you bearing date of May 22nd, 1911, for the survey of outlines of certain townships in the District of Sudbury, extending westerly from the district line of Sudbury-Nipissing, between district line posts 78 M and 96 M, we left C.P.R. station of Metagama on June 8th and proceeded by way of Fort Mattagami and across the six-mile portage leading from Lake Mattagami to Sinclair Lake, thus reaching the base line run by O.L.S. Fitzgerald the previous year, which forms the southerly boundary of the townships in question.

This route is too well known to need any description, being one of the main arteries of travel into that section of the country. It is interesting, however, to note the changes that are ereeping over it in the past few years, due to the construction of roads where formerly were only the deeply-worn trails, trodden for generations by the Indian packers of the Hudson's Bay Company, and the signs of still greater change soon to be wrought by the construction of the Canadian Northern Railway. These changes when complete, will render travel more expeditious, but working hand in hand with the fire fiend that invariably accompanies modern development, will utterly destroy the scenic beauty of the country and the romance of the old trails.

Our first business on arriving on the ground was to ascertain as nearly as possible the location of canoe routes through the area to be surveyed, and so enable us to place our supplies as economically as possible and to protect them so far as might be from the fires liable to spring up at any time, and from the depredations of the less responsible members of the wandering tribes of license holders at present so numerous in the north woods.

The actual work of the survey was commenced from the base line run by O.L.S. Fitzgerald, in 1910, and the development of the work can be seen at a glance over the index map accompanying the field notes of the survey. Our 2nd and 3rd meridians were commenced from the above base line and run north; while our first meridian was turned north and south from the first base line. Our first and second base lines were turned east and west from the 2nd meridian. This arrangement gave us the fullest use of canoe routes and the greatest protection against fire and theft in the matter of supplies.

Wooden posts were planted at half-mile intervals marked with the mileage from ½ M to 5½ M dating on meridian lines from south to north and on base lines from east to west. With two exceptions, iron posts, 11/4 inches in diameter, 3 feet long, forged at top and pointed at bottom, painted red, were planted beside the wooden posts to mark the several township corners. These iron posts were marked with the names of the townships facing diagonally into same, and in one instance where the base line between Zavitz and Hutt intersects the district line in Big Pike Lake, the iron post was planted west of the lake, and in addition to the names of the townships was marked with the distance from the district line intersection. No iron post was planted where the base line between Halliday and Hutt intersects the district line at a distance of twenty-seven links north from the iron post at 84 M, planted by O.L.S. Niven; nor was any planted where the meridian between Zavitz and English intersects the base line forming the northerly boundary of those townships at a distance of 5.565 chains easterly from the iron post at the south-west corner of the Township of Geikie. In both the above instances the wooden posts planted were heavily mounded with stone as an additional protection.

The area traversed by this season's operations, occupying about eighteen miles square and embracing the headwaters of the Redstone and Kapiskong or Grassy Rivers, presents topographically a neutral position between the gentle slopes of clay belt and the rougher sections of the rock country. It is the home of sluggish rivers and placid lakes with innumerable small lakes and streams throughout its area. While a very small proportion of it could be called level, or even approximately so, the hills and ridges are of low elevation, seldom exceeding twenty-five to thirty feet in height. These elevations are formed of drift material composed of sand, gravel and boulders, with an occasional rock outcrop showing.

Small areas of land could doubtless be obtained that would bear comparison with the less favoured cultivated parts of the older sections of the Province; but it is likely to be many years before any demand will arise among agriculturists for the kind of land represented by this section, and it is likely to remain more valuable as a producer of forest trees than of any other crop that might be introduced.

With the exception of two comparatively small areas where fire has destroyed the timber, the territory occupied by the survey is covered with forest. The timber cannot be considered of first value when viewing the area as a whole, as much of it is small and by far the greater part of the bush is composed of mixed timber, including spruce, white birch, poplar, cedar, jack pine, balsam and tamarac, the value of which as a lumbering proposition rests with the future. The locality would seem eminently suited for the growth of red pine and white pine, but as this timber is not greatly in evidence it would require practical encouragement in the way of planting. The present growth however, will doubtless increase rapidly in value if it can be protected from fire. There is a good stand of white pine and red

pine around the shores of Sinclair Lake, and scattered trees, extending northerly along the Kapiskong and its lake widenings, through the Townships of Nursey and Moher, and also the meridian forming the west boundary of Sothman and Semple. There is also a good block of white pine round a lake of about three miles in length, extending southerly into the Township of Nursey and approaching to within half a mile of the north boundary of same opposite 31/2 M. This last mentioned township is indeed the only one surveyed that could be considered important as a source of white or red pine. Along both the north and south boundaries of Semple there is a good stand of large jack pine. Cedar of good size and quality appears in a number of places, but the most important belt occurs on the meridian forming the boundary between Sothman and Halliday, where a thick, cedar swamp extends for two miles from the base line at the north of these townships with narrower belts at intervals until Lake Washagami is reached. The trees here run up to thirty inches in diameter, from thirty-five to forty feet long, stand thickly, and as far as could be observed from our cutting, appear to be generally sound. Young tamarac is also appearing in the swamps, but it will take many years to undo the mischief wrought by the passage of the sawfly, which destroyed the old timber, and the latter is getting rapidly beyond the stage of usefulness.

The first burnt area encountered was along the east branch of the Grassy River, where it is crossed by our first base line. This burn, which would appear to be about seven or eight years old, lies mostly on the east side of the river. A short distance south of the above base line, the green timber comes down to the banks on either side of the river, but as we did not travel the country to the south we are unable to say how far the burnt area runs in that direction. To the north burnt country extends along both sides of the river for about three miles. Another old burn of considerable extent occupies the north-westerly corner of English and extends northwesterly from Lake Muskasenda across the meridian forming the west boundary of English and the base line to the north. This burn was again run over by fire in 1910. A small burn was crossed on the Redstone at 4 to 4½ M. on first meridian and another of the present summer, between 2 and 3 M. on the west boundary of English.

Rock outcrops are not numerous, the rock formation being mostly covered by deposits of drift, and there appears to have been little prospecting done away from the immediate neighborhood of the canoe routes.

From the standpoint of waterways the district is an important one and has an interesting and intricate system of lakes and connecting streams. The Redstone River flows northerly from a small lake crossed by the base line forming the boundary between English and Semple, near its intersection with the meridian forming the east boundary of those townships, and affords a good canoe route for about one and three-quarter miles to the north, where a portage leaves to the east connecting with the main branch of the Grassy River. North of this portage, as far as followed, the river is shallow and travel is much impeded by driftwood and alder. The most important drainage outlet of the district is through the Grassy River and its tributary streams. From Lake Washagami crossed by the meridian between Halliday and Sothman at 1½ M. to 3 M.; two narrow lake-like expanses connected by a short stretch of stream extend about one and a half miles north of the base line Hutt and Halliday; and from thence it forms a stream of a chain in width entering the eastern branch of the Grassy River, some distance north of the centre of Hutt. This easterly branch of the Grassy River flows south across

the base line Zavitz and Hutt near 4 M. and base line Hutt, Halliday, at 3 M. and continuing south across the south boundary of Halliday, turns west and north across the south boundary of Sothman entering a chain of small lakes and debouching into Sinclair Lake at its north-east corner. Turning a point in the last mentioned lake the water proceeds north through the Kapiskong or Grassy River and its lake widenings on its way to the Matagami River. In its passage through Hutt and Halliday this river occupies a wide marshy valley, containing a luxuriant growth of wild rice, rushes and other grasses, through which it winds from side to side with slow current. Numerous canoe routes cross the country in every direction. One of these leaves Wing Lake, through which the eastern branch of the Grassy River passes on its way to Sinclair Lake, and traverses several small lakes and portages to Lake Washagami and presents the peculiar circumstance, that a person taking this route may travel a distance of about fifty miles, returning to his starting point, and with the exception of a mile or so at the beginning and the crossing of a few light portages, may travel down stream all the way. Another important canoe route leaves the bay extending east across the meridian Nursey and Sothman between 2 M. and 3 M., and traverses the country north through Sothman, Semple and English to Lake Muskasenda. There are two lakes of considerable size crossed by this canoe route, Birch Lake lying to the south and extending up to the base line Semple-English; and Trout Lake lying between that line and Lake Muskasenda. Our information of these lakes, however, is not sufficient to show them properly on the plan returned.

As the numerous portages attest, and as the natural features of the country would lead one to surmise, this section has been the trapper's paradise, and many furbearing animals are still to be found within its confines. Moose are very plentiful and the high ground covered with thick growth of moosewood or scrub maple, which occupies so large an extent of the land surface, affords ample winter provision for large numbers of these animals; while the numerous shallow lakes and sluggish river stretches provide an abundant supply of succulent lily roots for summer feed. The wide valley of the Grassy River in its eastern branch, with its miles of rice beds, gives great promise of ducks for fall hunting, and indeed many of these birds breed here. We need only say that grouse are becoming plentiful, pickerel may be caught in all the deeper waters and the hungry pike everywhere but in the tree tops, while by dropping a few miles further down river toward the Matagami the angler may fill as large a creel as his conscience will permit with speckled trout; that he may make the acquaintance of the black bear, see the beaver at work, enjoy magnificent scenery, and with a little effort spent in clearing out portages, travel comfortably in almost any direction his fancy may suggest.

This picture is true to-day. Should there be a recurrence of the drought of the past two seasons, no better means devised of protecting the country from fire, and no improvement in the personnel of these licensed to wander through the woods at will and disposed to destroy at leisure, a person reading the above description a year hence and on the ground it fits may have cause to regard it as a satire. Much of this country is littered with dry windfallen timber, is high and ridgy, and only needs a fair start on a breezy day to leave behind a blackened waste. That matters are serious in this respect is amply attested by the Porcupine disaster of the present summer, and yet aside from the loss of life, it is probable that no greater loss of timber was occasioned by that fire than by numerous others raging at the same time. On the day of the above disaster we were camped in the valley of the Grassy River on the base line Halliday-Hutt, where the opening gave a horizon denied

back in the woods, and could count three other fires on different sides of us, travelling with great rapidity and sending up vast volumes of smoke. Neither his supplies, his canoes, nor even the lives of his party, can under present conditions, be considered safe by the surveyor in the prospected area.

We have the honor to be,

Sir,

Your obedient servants,

(Sgd.) CAVANA & WATSON, Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 26.

SURVEY OF OUTLINES OF TOWNSHIPS, DISTRICT OF SUDBURY.

PETERBOROUGH, ONT., October 25, 1911.

SIR,—I have the honor to submit the following report on the survey of Township outlines in the Temagami Forest Reserve, District of Sudbury, performed by me, under instructions from your Department, dated June 8th, 1911.

I commenced the survey by running a meridian due south astronomically eighteen miles, from a point ten chains west astronomically from the south-west angle of the Township of Cabot, and from the 6th, 12th and 18th mile posts on this meridian I ran east astronomically to intersect a meridian run by Ontario Land Surveyors De Morest and Stull in 1910, and west astronomically six miles. Having completed this part of the work I produced the south boundary of the Township of Cabot to a point six miles and ten chains west astronomically from the south-west angle of the above township, from which point I ran a meridian north astronomically twelve miles three chains and fifty-three links to a base line run by Ontario Land Surveyor H. J. Beatty this season, and south astronomically seventeen miles seventy-four chains and ninety links to intersect the south boundary of the Township of Garvey previously run by me. I then produced the south boundary of the Township of Burrows west astronomically to intersect my meridian, thus completing the work.

All lines in connection with the above survey were well opened out, blazed, chained and posted. At each of the angles of the various townships, iron posts, one and one-half inches in diameter, three feet long and painted red, were planted—on these posts the names facing the respective townships, were cut with a cold chizel. On the meridian lines durable wooden posts six inches square were planted at the end of each mile with the number of miles said posts are distant north of the south-east or south-west angle of the adjacent townships, cut on the south side with a scribing iron. Durable posts four inches square and similarly marked with the half mile points were also planted on all lines running east and west, durable

posts six inches square were planted at the end of each mile with the number of miles said posts are distant west of the south-east or north-east angle of the adjacent townships, cut on the east side with a scribing iron. Durable posts four inches square and similarly marked with the half-mile points, were also planted.

Going south along the west boundary of the Township of Connaught, the line passes over an undulating sandy country timbered with Banksian pine, spruce, white birch, poplar, balsam, cedar, alder and willow. Considerable good red and white pine running up to 24 inches in diameter is seen between the fifth and sixth miles along the east side of Mattagami Lake.

Along the west boundary of the Township of Miramichi the country is of much the same general character and getting a little more rocky towards the south. A ridge of good red pine up to thirty inches in diameter is seen on this line between the third and fourth miles.

Along the west boundary of the Township of Garibaldi the country is of a more rocky nature—the timber being chiefly Banksian pine, spruce, dead tamarac, balsam, birch, cedar, alder and willow. No valuable pine is seen along this line, considerable windfall being encountered along the first mile.

Going east along the north boundary of the Township of Miramichi the line passes through a rocky broken country as far as Napawquazi Lake, where it becomes low and swampy and contines of this general character up to the third mile, from which point to the north-east angle of the township the country is of a more sandy character, the line passing through some excellent white pine running up to twenty-four inches in diameter.

Going east along the north boundary of the Township of Garibaldi, the country is comparatively level or gently undulating, the timber being chiefly Banksian pine, birch, spruce and balsam up to fourteen inches in diameter. There is along this line a stretch of very nearly four miles absolutely destitute of water.

Going east along the south boundary of the Township of Garibaldi to the Opikinimika River the country is rolling and rocky, the timber being chiefly Banksian pine, spruce, birch and balsam, up to twelve and fourteen inches in diameter, with a belt of good red pine up to fourteen inches lying immediately to the west of the river.

Going west along the north boundary of the Township of Togo the country is rolling and rocky, timbered chiefly with Banksian pine, spruce, poplar, and alder; there is no white or red pine along this line.

Along the north boundary of Brunswick Township the country is very similar in character, but along the first and second miles of this line considerable white pine up to thirty inches in diameter is seen.

On the north boundary of Londonderry Township, no valuable timber is met with, the prevailing varieties being Banksian pine, spruce, white birch, poplar and balsam averaging from eight to twelve inches in diameter.

Along the northern limit of the Township of Garvey the country is of a similar character, no valuable timber being seen.

Going east along the south boundary of the Township of Garvey, the country for the first two miles is much the same as that already described; at this point, however, good white pine up to twenty and twenty-five inches in diameter is entered and continues to Donnegana Lake in the south-west angle of the township. The west boundaries of the Townships of Garvey, Londonderry, Brunswick, Togo and Mattagami comprising thirty miles, may be described as rough and rocky, the prevailing timber being Banksian pine, spruce, birch and poplar; this timber runs

from eight to fourteen inches in diameter. Along this line various long stretches of spruce and dead tamarac swamp are traversed—the line also passes through several belts of good white pine running up to thirty inches in diameter. Various streams and lakes traverse these several townships, all of which no doubt will be minutely described by those engaged in this portion of the work.

All the country surveyed by me this season is covered with green timber-

there being practically no brulé of recent date.

The geological formation of this locality is the Huronian—no mineral of value being seen. I think I am also quite safe in saying that in the eight townships outlined by me this season, there is absolutely no land fit for agriculture.

I found the average magnetic variation about eight degrees west.

Moose, partridge, beaver and otter are fairly plentiful.

With the exception of the intense heat during the early part of July, I found the season very favourable for this work. Owing, however, to the dense smoke caused by the Porcupine and other bush fires, I found it imposible to obtain astronomical observations as often as I wished.

Accompanying this report are plans, field notes and accounts, all of which I trust will be found complete and satisfactory.

I have the honor to be,
Sir,
Your obedient servant,
(Sgd.) J. W. FITZGERALD.

0.L.S.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 27.

Survey of Township Outlines, District of Sudbury.

Guelph, January 18th, 1911.

SIR,—I have the honor to submit the following report on the survey of base and meridian lines south of the National Transcontinental Railway in the District of Sudbury, under instructions from your Department, dated May 11th, 1910.

I commenced this work at the south-west angle of the Township of Machin, being the north-west angle of the Township of Shackleton and from that point ran south nine miles to the south-west corner of Shackleton. I then ran east nine miles to intersect O.L.S. Speight's meridian line of 1905, and came out one chain and seventy-seven and one half links north of the IX mile post on that line.

I then returned to the post at the south-west corner of the township and ran the south boundary of Nansen west nine miles.

I then returned to the Ground Hog River and went down the river to the railway, and from there proceeded to run my second base line. This line forms the south boundaries of the Townships of Fauquier and O'Brien and the north boundaries of Nansen and Swanson. Upon the completion of this line I cut a light line north two miles to find the VII M. post on O.L.S. Niven's meridian line of 1906, and then produced that meridian line south to intersect my base line.

I returned along this base line to the boundary between O'Brien and Fauquier, and ran south nine miles on the line between Nansen and Swanson to intersect my first base line, and then produced that base line westward to the south-west corner of the Township of Swanson and there turned north and ran the west boundary of that township.

All base lines were run as nine mile chords of the parallel of latitude.

On base lines a wooden post was planted at the end of each mile and marked on the east side with the number of the mile.

At township corners a 17/8 inch iron post was planted beside the wooden post and both posts were marked with the names of the adjacent townships.

On meridian lines wooden posts were planted one and one half miles apart

and marked with the mileage on the south sides.

The country included in this survey is almost wholly drained by the Ground Hog and Kapuskasing Rivers, the Townships of Nansen and Shackleton draining into the former and the Township of Swanson into the latter. As a whole the country is undulating and the drainage will be easily accomplished. On part of the west boundary of Swanson the land is broken with numerous ravines and small creeks, while the east boundary of that township is level and swampy.

A few thousand acres in the south-west corner of this township and a small area in the south-east corner of Fauquier had been burnt over some years ago, and some good spruce and jack pine timber destroyed. This burnt land is mostly dry and can easily be cleared, and considering its proximity to the railway, should soon

be brought under cultivation.

The soil throughout is clay, which in the swamps is overlaid with black muck of varying depths. Probably about one-half of the land will be found suitable for farming with drainage and as the percentage of rocky land is small, the agricultural possibilities of these townships are fairly good.

The timber is chiefly spruce with here and there some medium sized poplar and some small white birch. The trees as a rule are not large and in many places are of scrubby growth, yet considerable areas of timber suitable for railway ties

were passed through.

The Ground Hog River is a good stream with an average width of about six chains and a depth of from four to eight feet, and flows with a good current. There are no rapids on the river within the limits of this survey.

Rock crops out at a number of points along the river and some prospecting has been done. A number of rocky ridges were crossed in the interior but no economic

minerals were found.

Large game is not plentiful in this section of the country and no fur-bearing animals were seen. Fish were also scarce in the streams.

Accompanying this report are the field notes and plan of the survey in the usual form.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) James Hutcheon, Ontario Land Surveyor.

Appendix No. 28.

SURVEY OF TOWNSHIP OUTLINES, DISTRICT OF NIPISSING.

ALMONTE, Dec. 5th, 1911.

SIR,—I beg to submit the following report on the survey of township outlines in the territory east and west of the township of Maisonville in the District of Nipissing, performed under instructions dated May 27th, 1911. I outfitted at Sudbury and North Bay, and on the 22nd of June, commenced the survey at the north-west angle of the Township of Otto, from which point the line between the Townships of Teck and Grenfell was run due north 6 M. 3.65 chains to the southerly limit of the Township of Maisonville; then from the south-east angle of the Township of Maisonville the line between the Townships of Bernhardt and Teck was run east astronomically (six mile chords) to the westerly boundary of the Township of Lebel. Having completed the above two township boundary lines the survey was continued by starting from the south-west angle of the Township of Maisonville, and running west astronomically (six mile chords) a distance of eighteen miles (18 M.). the sixth and twelfth miles on the above mentioned first base line, meridian lines were run south to the northerly boundary of the Township of Holmes 6 M. 3.47 chains; to the northerly boundary produced westerly of the Township of Holmes, 6 M. 4.15 chains and northerly to the southerly limit of the Townships of Playfair and McCann. A second base line eighteen miles long was run west astronomically (six mile chords) from the north-west angle of the Township of Maisonville; and the last line, viz:-between the Townships of Melba and Bernhardt-was commenced at the north-east angle of the Township of Maisonville and run east astronomically (six mile chords) 5 M. 71.89 chains, to intersection with O.L.S. Newman's meridian line run in 1907.

The above lines were well cleared and the adjacent trees blazed in the usual manner. Wooden posts of the most durable material available properly and distinctly marked, were placed where possible at the even miles (6 in. square) and half miles (4 in. sq.) from the southerly and easterly extremities of the above lines; when these points came in the water the posts were planted on the shore nearest the even mile or half mile as the case might be, with its chainage in miles, chains and decimals, marked on the proper face of the post. The mile posts were marked with Roman numerals and the half-mile posts were marked with Arabic numerals.

Every post was planted firmly and when possible a cairn of stones was built around it to render it more permanent, and bearing trees were marked and noted in the field notes.

Iron bars marked with the names of the adjacent townships were placed alongside the wooden posts at the following points, viz.:

The north-west corner of Teck.

The north-east corner of Teck.

The south-east corner of Dunmore.

The south-west corner of Dunmore.

The north-west corner of Sheba.

The north-west corner of Nordica.

The intersection of Bompas, Dunmore, Lee and Terry.

The intersection of Dunmore, Sheba, Nordica and Terry. The intersection of Lee, Terry, Black and Tolstoi. The north-west angle of Black.

The north-west angle of Tolstoi.

on the easterly shore of Wataybeeg Lake in the boundary between Terry and Tolstoi at 5 M, 63.5 chains; on the northerly shore of Wataybeeg Lake in the boundary between McEvay and Tolstoi at 0 miles, 26 chains; on the westerly shore of Clearwater Lake in the boundary between Melba and Bernhardt at 0 miles, 3.24 chains; and at the following points the existing iron bars and wooden posts were marked with the names of the new townships on the proper face, viz.:

The north-west angle of Maisonville.
The north-east angle of Maisonville.
The south-west angle of Maisonville.
The south-east angle of Maisonville, and
The north-west angle of Otto.

At frequent intervals throughout the survey observations on Polaris were taken for azimuth and the magnetic variation which ranges between eight and eleven degrees west of north was read, the results being entered in the field notes.

All triangulations and observations were very carefully checked in the field and noted in the field note books.

Soil.

The country generally is composed of rolling sand plains, spruce, muskeg, and rocky hills, and it is not at all adapted to cultivation, except a few small patches.

In places where the soil is heavier and vegetation better, there are a great

many loose boulders.

There are two inhabitants in the area, one an Indian trapper, Basil McDouga!l by name, who has a cabin on Wataybeeg Lake, and William Biederman, who is both mining and trapping from his cabin on Fall Duck Lake in the Township of Terry.

ROCK FORMATION.

The district generally speaking is composed of ridges of diabase of the post Huronian period, running in a northerly and southerly direction.

Practically no prospecting has been done in that part of the country surveyed, which lies to the west of the T. & N. O. Railway, and there are very few outcrops of mineral bearing rock. In the case of the westerly and northerly boundaries of Teck, and the northerly boundary of Bernhardt, the rock formation is diabase and many high ridges of bald rock with steep ascents were encountered.

Although we saw no surveyed claims and very few staked claims during the progress of the survey, it was quite apparent, on coming out, that prospectors were following up the survey lines, staking claims and doing considerable prospecting.

TIMBER.

The timber consists almost wholly of second growth Banksian pine, spruce, poplar, and white birch of little or no commercial value. Along the 2nd and 3rd

and 4th miles of the northerly boundary of the Township of Nordica, the Banksian pine attains a size varying from 8 inches to 12 or 13 inches in diameter, and in some wet places where it escaped the fire, spruce of a good size was noticed.

WATER POWERS.

Being on the height of land there are no water powers in the district at all, but quite a number of beautiful lakes suitable for summer tourists, the principal of which is Wataybeeg Lake, 8 miles long and a mile wide. In places it contains numerous islands, some of them having good sand beaches and being fairly well wooded. The lake abounds in fish, principally pike, pickerel and trout.

GAME.

The whole district abounds in game, principally moose. Traces of bear were seen on several occasions and a few beaver were noticed. Partridge were very plentiful.

Accompanying this report is a general plan on a scale of one mile to an inch, a timber plan on the same scale, field notes, oaths of chainmen, and all other necessary documents.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) Andrew Bell.
Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 29.

Survey of the Outlines of Townships, District of Nipissing.

BRANTFORD, November 11th, 1911.

SIR,—I have the honor to submit the following report on the survey of certain base and meridian lines north of Larder Lake in the District of Nipissing:—

Upon receipt of the instructions I immediatetly proceeded to make arrangements for supplies and transportation and on the last day of July left Brantford for Dane Station on the Temiskaming and Northern Ontario Railway accompanied by the men from Brantford and vicinity. I was joined at Haileybury, Ont., by the rest of my party, making a total of fifteen men including myself. This number on the completion of the work had become reduced to twelve, ten of these being of the original fifteen.

In getting on the ground with my supplies from Dane Station I used the Larder Lake stage road to the point where it crosses the White River, in the southeast corner of the township of Gauthier and from this point went north by canoe

as far as Kennedy Lake, where I established a main cache. The point of commencement specified in your instructions was reached on August the eighth and the work started the following morning and continued without interruption until

completed.

Your instructions were rigidly adhered to throughout the work and well-opened lines cut, particular attention being paid to blazing. The base lines were cut east (or west) astronomically in six mile chords and the meridians astronomically north (or south). During the progress of the survey a very great deal of rainy and unsettled weather was encountered, making it difficult to obtain observations at regular intervals. The greatest amount of line cut between observations was six miles and the greatest departure from the line astronomic course that was discovered was four minutes, this occurring only in two cases.

No great fluctuation of the magnetic variation was noticed, the needle reading

from ten to eleven degrees.

The return trip was made in four inches of snow, arriving at the railway on October 25th.

GENERAL FEATURES.

The country comprising the twelve new townships outlined presents a considerable variety of topography. Roughly speaking, the westerly six townships are slightly rolling, sand or clay country, with the former predominating and with occasional outcroppings of rock in the form of well-rounded mounds or humps, usually quite steep and sometimes precipitous near the bottom, and varying in height from fifty to one hundred feet. The easterly six townships cover a more rugged formation, rock being in evidence nearly all the time and the line being so rough in many places that it was necessary to make considerable detours in moving camp.

Rock.

All the rock encountered was identical in texture, being a barren Keewatin schist with no indication of any mineral of any kind. No quartz was encountered.

Soil.

Sandy loam and sand largely predominates on the outlines of Morrisette, Arnold, Bisley and Clifford. A few swamps of small extent were encountered in this area and a number of small lakes. On the west limit and the easterly part of the south limit of the township of Elliott, as well as on the east limit of Tannahill a good clay loam predominates, apparently continuing down into Ben Nevis, Pontiac, Katrine and Ossian.

TIMBER.

In general the timber is poor from a commercial standpoint. Of white or red pine there is practically none. In the sandy soil jack pine occurs in thick groves, but rarely of any size; birch and poplar of course predominate on the hills, being small and thick on the sand and rock hills. In the clay are good areas of spruce which grows to twenty-four and thirty inches and balsam to eighteen and twenty inches. All the tamarac is dead. Very little brulé was met with.

WATER.

The whole area seems to be dotted with small lakes and ponds, containing pure, clear water. These are mostly quite small. A feature frequently noticed was that

a number of them had no apparent outlet or feeder of any kind. This is particularly true of sandy country where they occur wiith great frequency. No streams of any size were encountered except the Abnageezy River, and on this no water power was in evidence.

GAME.

Moose were frequently seen, and apparently are quite numerous, as many as twelve having been seen by different members of the party in one day. Their trails in the woods were frequently encountered and were often so well travelled that but for the absence of blazes and axe cutting would be mistaken for portages.

No deer or wolves were encountered or indicated, but three bears were seen and their tracks seen quite often. Many of the small lakes were apparently barren of fish, but in others pike and pickerel were readily caught. Rabbits and partridges are plentiful and muskrats particularly so. In Ben Nevis and Pontiac fresh beaver workings were seen, but no evidence of other fur-bearing animals, although evidences of the Indian trapper were seen all over the area travelled.

CANOE ROUTES.

The canoe route from the stage road near Larder City to Verna Lake on O. L. S. Newman's meridian was found to be a full day's trip. This included five flat rapids and three short portages on the White River leading to Beaverhouse Lake, a three-chain portage into Kennedy Lake, a crooked creek, a five-chain portage, another small lake and a fifteen-chain portage into Verna Lake.

From the north-west corner of Verna Lake northward a forty-chain portage leads over the height of land into a series of lakes and ponds opening out into Keeth Lake in O.L.S. Newman's meridian, which lake empties into a navigable branch of the Abnageezy River, crossing the north limit of the township of

Clifford at the four mile post.

I have the honour to be,

Sir,

Your obedient servant,
(Signed) John E. Jackson,
Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 30.

SURVEY OF OUTLINES OF TOWNSHIPS, DISTRICT OF NIPISSING,

NEW LISKEARD, November 9th, 1911.

SIR,—I beg to submit the following report on the survey of Township outlines in the District of Nipissing, in the Temagami Forest Reserve, west of the surveyed townships of Holmes, Flavelle and Willison, and south of the townships of Cleaver, McNeil and Robertson, performed under instructions dated Toronto, May 17th, 1911.

I commenced my survey at the north-west angle of the township of Shillington and ran north astronomically a distance of thirteen miles, twenty-four chains, eight links to intersection with the south boundary of the Matachewan Indian Reserve. From the sixth and twelfth mile of this line I ran east astronomically to intersection with the south-west angle of the Townships of Flavelle and Holmes respectively. From the sixth mile I ran also west astronomically to intersection with O. L. S. Niven's line near the eighty-fourth mile post on the aforesaid line, being the boundary between the Districts of Sudbury and Nipissing. From the sixth and twelfth miles of this line I ran south astronomically to intersection with the line constituting the north boundary of the Townships of Rankin and Raymond, and also north astronomically to intersection with the line constituting the south boundary of the Townships of McNeil and Robertson.

From the twelfth mile of my first north line I ran west astronomically to intersection with the boundary between the Districts of Sudbury and Nipissing near the ninetieth mile intersecting my second and third north line en-route. I also produced the unfinished portion of the south boundary of the Township of Robertson to intersection with my first north line drawn from the point on the north boundary of the Matachewan Indian Reserve where that line would have intersected if it were drawn through the Reserve. I also ran west astronomically from the north-west angle of the Township of Holmes to intersection with the aforesaid north line.

The aforesaid lines were well cut out and the adjacent trees blazed in the usual manner, while wooden posts of the most durable timber available hewed on four sides and properly carved, were planted where possible at the end of each forty chains from the starting point of the aforesaid lines. When these points came in the water or in an otherwise unsuitable place, the posts were planted at the nearest suitable point with the chainage in miles, chains and decimals carved on the face of the post. Posts were in all cases firmly planted, and where possible were supported with a mound of stones built so as to make its tenancy more secure, and suitable bearing trees were carved and noted for the even mile posts, no bearing trees being placed at the half mile posts.

Iron posts and extra large wooden posts with the chainage and names of the adjacent townships carved thereon, were planted at the following points, viz.:

At the north-east angles of the townships of Hincks, Argyle, Baden, Montrose, Bannockburn, Powell, Cairo, Midlothian, Doon, Yarrow, Kimberly; at the southwest angles of the townships of Hincks, Montrose, Doon; at the intersection of my first north line with the Indian Reserve and at the south-east angle of the Township of Doon and at the north-west angle of the Township of Alma.

At frequent intervals throughout the course of the survey, observations on Polaris were taken for the purpose of obtaining azimuth, and the magnetic variation, which ranges between eight and nine degrees west of north, was noted, the results being entered in the field-book.

The chainbearers were duly instructed, particularly with regard to care in measuring inclined surfaces and in keeping the field notes so that the natural features of the country passed through would be clearly shown.

The natural features I will discuss under the following heads, viz.:

Soil, Rock-Formation, Timber, Game.

SOIL.

From an agricultural point of view, this district as a whole is uninviting. The soil is mostly light sandy loam or reddish clay loam, the only good farming areas met with being in the Townships of Hincks and Argyle.

ROCK FORMATION.

For the most part the conglomerate rocks were in evidence between the East and West Branches of the Montreal River, on the east of east branch and

south of Fox Rapids, syenite and conglomerate.

The Townships of Doon, Midlothian, Montrose and Bannockburn present massive mounds, cliffs and mountains, which are principally fine close-grained rocks of the Huronian period, in some places having a slate-like appearance. Some small veins of quartz were encountered which appeared to be poorly mineralized, being devoid of sulphides or other indications of the noble metals.

TIMBER.

Some fine blocks of Yellow Pine were encountered (see plan) and several good belts of the best of white spruce and a number of belts of tie timber being composed of B. Pine and spruce. The district is heavily wooded, except where colored brown on tracing and seems to recover very rapidly from the ravages of bush fires, which have been of frequent occurrence.

GAME.

This is a natural game preserve and is well stocked with all kinds of game despite the fact that more than a dozen Indian families eke out an existence with nothing but the fur and fish and moose-meat to draw on. Beaver were seen by us within the confines of the Indian reserve, swimming around in broad daylight quite as freely as muskrats are wont to do. Moose are plentiful as also partridge, mink, muskrat, martin, rabbit, weasel and a few bear and wolves.

The only important water power is the falls about three miles from Fort Matachewan at the Great Northern Bend, which I was informed by M. S. Lafricain, had been surveyed two years ago with a view to estimating the probable power

available.

In regard to P.L.S. Duncan Sinclair's exploration line 1867, I may say that it is entirely obliterated and that we noted only one tree marked 111 M—61.84, presumably being on his traverse of the Montreal River.

Accompanying this report is a general plan on linen mounted paper, a tracing of same on scale of one mile to an inch as a timber plan, field notes, accounts, etc.

All of which is respectfully submitted.

I have the honour to be,

Sir.

Your obedient servant,

(Signed) C. H. FULLERTON,
Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ontario.

Appendix No. 31.

SURVEY OF ISLANDS IN THE GEORGIAN BAY, DISTRICT OF PARRY SOUND.

TORONTO, March 28th, 1911.

SIR,—In accordance with instructions from your Department dated April 16th, 1910, to survey certain islands in the Georgian Bay, together with shore line in front of the Townships of McDougall, Carling and part of Shawanaga, I have the honor to submit the following report. The work was commenced by retracing the southerly limit of the line between Lots 30 and 31, Concession 11 and Lot 20, Concession A, Township of McDougall, from its intersection with the westerly limit of Church street in the Town of Parry Sound, through to the shore of Georgian Bay, where a five-inch pine post was planted, one chain from the lake shore, where the traverse of the shore line was started and carried continuously from Sta. 0 here to Sta. 410 on the Concession line between Concessions VIII and IX, Shawanaga.

Posts of the most durable wood obtainable were planted at intervals of one mile or thereabouts at prominent points along the shore in cairn of stones and marked consecutively from W 1 to W 25 in Roman numerals. All the original Township lines were searched for and found and marked whenever possible. In several cases no traces of the original lines were to be found. All islands in front of the above townships were accurately traversed either with transit and micrometer or transit and chain, and in every case, posts of the most durable wood obtainable were planted in a cairn of stones at a prominent point at a safe distance from high water and marked consecutively in Roman numerals from 1C to 405C, and as far as practicable all islands were tied by triangulation to points on the traverse of the main shore.

I found it impracticable in a great many cases to divide up the larger islands into parts containing not more than 10 acres as per your instructions, or to post them so that they might be so divided on the plan. In other cases, the larger islands were not marked with division posts because of information either from plans in my possession or from other sources that they were patented. In the case of Sandy Island, the plan in my possession did not conform very accurately with the present shore line, and islands shown as Ingersoll, Gertrude are now part of Sandy Island, due to the recession of the water of Georgian Bay, some 5 or 6 feet since the survey was made in 1881. The island shown as 243C at the north-east corner of Sandy Island, is now part of Sandy Island, there being no channel between them.

In the case of Franklin Island, traverse was made with triangulation from point to point and sub-traverse of bays made with transit and micrometer.

Posts were planted at prominent points as nearly half a mile apart as possible, and marked successively from F 1 to F XV. The work was carried on with all despatch and speed commensurate with accuracy, although considerably hampered with continual rains until well on in the month of June.

The traverse of the shore line was carried to the northern boundary between Concessions VIII and IX, Shawanaga, on October 21st, 1910, all islands along the main shore being tied by triangulation to the shore traverse on the way north and traversed on the way south.

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I found it impracticable to cross the wide stretch of Shawanaga Bay, owing to the rough weather at this season. Thus numerous islands in the area known as Grand Camp Group were left for further operations.

Accompanying this report are plans on mounted paper on scale of 20 chains, in 5 sheets, together with tracings of same, tracings of the whole survey in 5 sheets on scale of 10 chains to show field notes, plans of each island in detail on scale of 2, 3, 4, 5 or 10 chains, copy of diary covering the season's operations, descriptions of islands, showing their acreage, names, numbers, etc., together with accounts in triplicate, which I hope will be found satisfactory.

I have the honor to be,

Sir,

Your obedient servant,

(Signed) J. H. Burd, Ontario Land Surveyor.

The Honourable, The Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 32.

SURVEY OF ISLANDS IN GEORGIAN BAY, IN FRONT OF TOWNSHIPS OF HARRISON AND SHAWANAGA, IN THE DISTRICT OF PARRY SOUND.

Barrie, October 31st, 1911.

SIR,—In compliance with your instructions bearing date May 19th, 1910, for the survey of Islands in the Georgian Bay in front of the Townships of Harrison and Shawanaga, I beg to make the following report:

The islands in this district are of this character: Those not immediately next the outer lake have clean cut shores as a rule, although there are many marshy bays. These islands are generally rough in surface, differing from Muskoka in not being so well filled in with soil. The pine clad shores are very pretty, but in many instances fire has destroyed this beauty. The second growth is principally of birch, poplar and oak. When the outer lake is reached we find the islands flat and having marshes in their interiors, when large, and water lies on the surface in pools nearly everywhere. This has the disadvantage of breeding mosquitos late on in the year. There is an outermost belt of shoals, bare of verdure, and then a belt of rocks with scrub cedars and occasionally a pine. Then nearer in the vegetation becomes thicker and the pines increase in number. The islands have been picked over now in this district so that of the smaller islands none remain of any pretentions to beauty, except those of very small acreage or inferior situation. There are a certain number of points on large islands of some value and a larger number which will become more valuable as the district fills up, for the willingness of the public then to buy will depend on the possibility or otherwise of getting anything else. The early sales in this region were of beautiful islands at a nominal figure with no conditions as to improvement, so that there is little

Crown property now of value, and but few houses on the patented islands. It is true that this beauty was not an inalienable part of the property, for the pine was not sold and the destruction of the pine would destroy much of the charm of the neighborhood, as there is no fringe of hemlock along the shores, as in Muskoka, to conserve the wooded appearance.

Many islets have been numbered that would have been omitted in earlier days, for several reasons. Firstly, the instructions were strict as to this and also the fact was sufficiently clear (from my experience) that most people desired to control what they termed rocks, (viz.: islets of very small acreage with a few shrubs or treelets on them), when opposite their property, and further, that property was being acquired already in the neighborhood that was second at least, and to be on the safe side everything that possibly could command any sale in the future was numbered.

In describing the islands, the desirability for residence, when the position is good, will vary with the demand. It is evident that people will now buy and build on property that formerly would not have been looked at for a moment.

In the division of the large islands the length of shore line allotted to each parcel depended firstly on the requisites for residence, viz.: site, harborage, etc., but in many cases the value or desirability of the land was so small that the parcels were made large to avoid the time and expense of divisions which might never be utilized or not needed for an indefinite time. In fact, many divisions were made with the feeling that labour was being lost as no market would be obtainable for a long time and in fact a large proportion of the entire survey was considered as valuable solely for the sake of having an accurate map.

The numbering of the islands was intended to be as consecutive on the ground as possible, of course. It is manifestly impossible to have this in every direction; also, in exceptional cases the numbering is quite irregular on account of previous omission from one cause or another. The islands are painted with Roman numerals in white lead and oil and where trees were not blazed and carved with the number of the island, solid pine posts were used, the upper part squared and carved with the number and the lower part left in the round. The posts were cut on the mainland, out of view, and no destruction of timber on the islands was allowed.

The cost of the survey was possibly greater than it would have been with no previous surveys as the work would have been much more straightforward. Certainly the use of the private survey plans increased the cost of draughting considerably and held back that part of the work very materially in time of accomplishment. A considerable saving of time to the surveyor would also have been effected if there had been no previous patents to deal with.

I have the honor to be,

Sir,

Your obedient servant,

(Signed) A. G. ARDAGH.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 33.

SURVEY OF THE SOUTHERN PART OF THE TOWNSHIP OF ALEXANDRA, DISTRICT OF SUDBURY.

Delta, December 23rd, 1910.

SIR,—Under your instructions dated July 5th, 1910, I have surveyed the southern part of the Township of Alexandra in the District of Sudbury and beg to submit the following report:

The survey was carried out agreeable to instructions. Iron bars were marked and planted as shown on plan and field notes.

In the south-eastern part of the Township there is a large open spruce swamp and a considerable part of the township lying east of Poplar River is swampy with poplar ridges, but approaching the north boundary the country is higher and drier. On the high ground and ridges the soil is more of a clay loam than in the swamp, where it is heavy clay. The land west of Poplar River extending for about two miles is higher than that of the eastern portion of the township and is in places sandy and more suitable for agricultural purposes. Approaching the west boundary the country again becomes swampy with poplar ridges extending east and west. The land in the vicinity of the lakes is generally low and swampy.

The prevailing timber throughout the Township is White Spruce, but in most places too small for merchantable timber, that in the swamps being from two to four inches in diameter, but on parts of the higher ground where it is mixed with poplar, it is from four to ten inches in diameter, and suitable for pulpwood. The poplar ranges from four to ten inches in diameter, but in some places seems to be dying. The timber on the high ground west of Poplar River is larger than elsewhere. Occasionally there are spruce trees twenty inches in diameter. On the point of land extending into the lake on lots 18 and 19, concessions VI and VII there is Norway pine about fourteen inches in diameter. This is the only place where pine was seen in the township.

Along the north boundary there are several outcroppings of rock but without indications of mineral. About one and a half miles south of the north boundary and west of Poplar River a considerable area of surface rock was encountered, but as on the north boundary there were no indications of economic mineral.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) WALTER BEATTY, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 34.

SURVEY OF THE TOWNSHIP OF MACHIN, DISTRICT OF SUDBURY.

GUELPH, ONT., March 29th, 1911.

SIR,—I have the honour to submit the following report on the survey of the Township of Machin in the District of Sudbury, made in accordance with instructions from your Department, dated May 11th, 1910.

This township is on the Ground Hog River and lies north of the National Transcontinental Railway and was reached by means of the contractors' train

on that railway from Cochrane.

This township is nine miles square and was laid out in lots of one hundred and fifty acres each under the system of survey approved by Order in Council of April 26th, 1906.

The survey was commenced at the south-east angle of the township, which is about 2¹/₄ miles north of the railway, which point is marked by the six mile post on O. L. S. Speight's meridian line of 1905. The south boundary was run west from that point and was posted at each lot in the regular way and the sidelines projected northward from it.

The railway crosses the south-west corner of the township, cutting lots 28, 29 and 30 in the first concession.

The survey lines were in every case run in the centres of the road allowances. On the concession line a post was planted on the survey line at the end of each lot, also one on the south side of the road allowance and one on the north side. The posts planted on the survey lines were marked with the numbers of the lots on the east and west sides and with the letter "R" on the north and south sides. The posts at the lot corners were marked with the lot numbers on the east and west sides and with the concession numbers on the north or south sides, according to the positions of the posts, and with the letter "R" on the side facing the road allowance. At the side roads a post was planted at the intersection of the survey lines and marked "R" on four sides and a post was placed at each of the four lot corners and marked with the number of the lot and concession and with the letter "R" on the two sides facing the road allowances.

The 17/8-inch iron posts and the wooden posts at the township corners were marked with the word "Machin" on the side facing the township.

Iron posts 1¼-inch in diameter were planted beside the wooden posts at the following points on the survey lines, viz.: On the north shore of the lake between lots 12 and 13 in the first concession, on the line between concessions VI and VII at the east boundary and at the lots 12 and 13 side road and at the west boundary, on the north boundary at the lots 12 and 13 side road. These posts were marked "R" on four sides and with the numbers of the adjacent lots and concessions.

The Ground Hog River enters the township from the south at lot 24, Con. I, and flowing a little to the north-east leaves it at lot 16, Con XII. It has a width of from six to ten chains, and flows with a good current. In lot 18, Con. VIII there is a short rapids with a fall of about nine feet. There are a number of small lakes in the township.

The land to the west of the river is undulating with a good clay soil and is well timbered with spruce and poplar. In the eastern part of the township the land is more level with a larger percentage of swamp, and the timber somewhat smaller.

There is a small area of burnt land along the river in concessions eight and nine, and another on the west boundary extending from near the south-west corner of the township to the fifth concession.

On the whole the township is a fairly good one, there are some ridges of rock in various parts and some swamps which will require drainage, but more than half of the area can be brought under cultivation without difficulty.

Very little large game was seen and no fur-bearing animals. Fish was also

scarce but partridge were plentiful.

Accompanying this report are the field notes and plan of the survey and the timber plan.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) James Hutcheon. Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 35.

SURVEY OF THE RESIDUE OF THE TOWNSHIPS OF BENOIT AND MAISONVILLE, DISTRICT OF NIPISSING.

ELK LAKE, November 2nd. 1910.

SIR,—I have the honour to report that under instructions from your Department dated July 7th, 1910, I have completed the survey of those parts of the Townships of Benoit and Maisonville not previously subdivided into lots.

In 1908, Mr. C. H. Fullerton, O.L.S., surveyed thirty-two lots in Maison-ville and twenty-seven lots in Benoit along the Temiskaming and Northern Ontario Railway. This year I laid out the remaining forty lots in Maisonville and forty-five lots in Benoit, four of the former and eleven of the latter being west of the railway.

Probably about one-half of the country included in these lots is suitable for agricultural purposes, being covered with a rich clay or sandy loam, the remainder consisting of outcrops of native rock, muskeg, water or sand containing many drift boulders. The rocky portion of these townships may prove valuable for mining purposes, a considerable number of claims having been staked and much of the rock apparently not having yet been well prospected. Practically all the hills shown on the plans accompanying this report are native rock, while there is a considerable area of rock not much elevated above the surrounding country.

With the exception of about one thousand acres of recently burned country and possibly two or three times that area of open muskeg and beaver meadow, these lots are all thickly timbered mostly with second growth poplar, white birch, banksian pine and spruce up to eight inches in diameter, but there is besides a large amount of valuable timber and pulp wood. Roughly estimated about half the area surveyed in Maisonville and one-third that in Benoit is covered with valuable timber, spruce, cedar, white birch, and poplar up to eighteen inches in diameter, and some pitch pine large enough to be useful. The best of the timber is in that part of Maisonville north of the height of land. The location of the various kinds of timber and open country is shown on the timber maps and in the field notes accompanying this report.

There are nine lakes, or parts of lakes, in that part of Maisonville which I have surveyed, several of these south of the height of land being deep and clear. and apparently containing many fish, principally pike and pickerel. The largest lake in the township is Wolf Lake, north of the height of land. The lake is muddy and shallow; being probably nowhere more than about six or eight feet deep. The township of Benoit contains no lake except a small corner of Butler Lake on the western boundary. The only considerable body of water in this township is the Black River, which enters the township at the north-easterly angle of lot one, concession one, and flows northerly close to the eastern boundary of the township to the middle of concession five, when it turns westward. In concession four it leaves the township, re-entering it about half a mile farther north. East of the township it is apparently joined by a large creek or branch, as it has a greater body of water after re-entering than before leaving. From its first entrance to the fifth concession it is only a large creek, never much, if any, more than half a chain wide. It has in many places a good fall and swift current, though its flow is impeded by several beaver dams. From about five chains north of the southerly limit of the fifth concession to the junction with it of the White Clay River in lot six, concession five, it is deep and uniformly about one chain wide and has the same canal-like appearance that it has near the railway at the northern boundary of the township. There is at low water, all the way from concession four to the railway, a wide, clear, nearly flat clay bank, providing unobstructed walking for the whole of that distance.

Accompanying this report I am sending plans, timber maps and field notes.

I have the honour to be,

Sir,

Your obedient servant.

(Signed) A. D. GRIFFIN. Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 36.

Survey of the Township of Lyon Additional, District of Thunder Bay.

LISTOWEL, October 27th, 1911.

SIR,-In pursuance with instructions from the Honourable the Minister of Lands, Forests and Mines, dated June 20th, A.D. 1911, to survey an area west of the Township of Lyon in the Thunder Bay District, I beg leave to report the following:-

I left Listowel on July the 8th, and proceeded to Owen Sound where I took the Canadian Pacific Railway boat Assiniboia and arrived in Port Arthur on the morning of July 10th. On July 12th with six men, outfit and provisions I proceeded by Canadian Pacific Railway to Coglin Station, situate about 53 miles east of Port Arthur, from this point there is an old tote road leading through old Lyon Township to farming location A L 671, the distance being about three and a half miles. From this point I commenced work as per instructions by extending the north boundary two miles west, thence running south, etc. of the old posts and bearing trees on the old west boundary were gone. The northerly half of the portion subdivided is mostly rolling and hilly with some small rocky ridges, the southerly half is generally level with some large muskegs and good level spruce land. The shore along Black Bay is very indefinite and hard to define, the land along the shore is sandy and very low, the water forming low sand banks; a strip of land along the shore from two to five chains wide is covered with small timber and willows and back of this for about twenty chains the timber is small and there are numerous muskegs and land very wet as it is nearly down to the level of Black Bay.

This township is well watered with spring creeks and in all the larger streams brook trout abound. We found numerous springs of clear water, some of them bubbling out of the ground and very cold. While traversing Black Bay I noticed a tide of about six inches. All the high land with the exception of where it is stony and rocky will be good agricultural land; the timber and underbrush in the north half is very thick and heavy and the land will be hard to clear: the southerly half will not be so hard and with the exception of a strip along Black Bay will be fairly good land, although most of it will need to be drained. A Mr. Bruner, a German, who is the settler on location A L 635 has about eight acres cleared on the north side of the track and has about five acres under cultivation. oats, garden and potatoes, and the potatoes were a splendid crop, he expected to have about 400 bags.

The locations A L 678, R 601 have some of the best timber removed, but none of the land is cleared and I saw none ready for cultivation. A L 764 has about two acres cleared, and the land seems good. Location A L 561 also has a clearing but none under cultivation.

Under the head of minerals I beg leave to report that I found no trace of minerals, there is a high diabase ridge near the north-west corner of Lot 1. Concession XI. This ridge runs almost north-west and south-east; the rock is coarse and compact and upon examination I found no veins or trace of minerals.

Under the head of timber I beg leave to report the following:—The kinds of timber found were spruce, cedar, balsam, tamarac, birch and poplar and a few small jack pine. Lots 1 and 2, Concessions X and XI are covered with mixed timber; along the line between lots 2 and 3, Concesion XI, and between Concessions X and XI, Lots 2, 3 and 4, I found some fine cedar, some going two feet in diameter.

Under the head of soil I beg leave to say that the northerly half with the exception of rocky and stony places, the land seems to be good but not first class; the southerly half is broken by muskegs and low wet swamps, but a great deal of the land will be good for cultivation and all the low land with the exception of a strip along Black Bay can be easily drained.

The weather was very wet and foggy while doing this work; it rained every

day on the work with the exception of ten.

The Canadian Northern Railway parallels the Canadian Pacific for most of the way through this territory, and the cutting of the right of way was in progress while making this survey.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) E. D. Bolton, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 37.

SURVEY OF THE TOWN PLOT OF REDDITT, DISTRICT OF RAINY RIVER.

TORONTO, March 20th, 1911.

SIR,—I have the honour to report that in accordance with instructions from your Department dated 13th July, 1910, directing me to lay out a townsite at Redditt Station on the National Transcontinental Railway in the township of Redditt into building lots, I proceeded to that place from Sioux Lookout on the evening of the 14th of July, arriving there on the afternoon of the 15th, and after locating my camp on the south side of Basket Lake and Black River commenced the survey as soon as possible thereafter.

I may say that I laid out all the ground on Lot 5 in the 5th and 6th concessions of Redditt that I considered fit for building lots, and also a few lots upon lot 6, concession 6 on the north side of the railway grounds. The 10ts were laid out 66 feet wide and 150 feet deep as a rule and made to suit the contour of the

ground as nearly as possible.

I found a man named Leon Baitly living on the south-east part of lot 5 in concession 6, who had made certain improvements in clearing and building and claimed to be located for the lot. A memo of these improvements has already been sent to your Department.

I also found the offices of the engineers of the Transcontinental Railway located on the central part of lot 5, concession 4, but did not interfere with them

in any way beyond cutting a small corner off their clearing, as I did not deem it advisable to extend the Town Plot so far south. The engineers have quite a number of buildings and about 5 acres of clearing fronting on Armstrong Lake to the south of them, and from which a water pipe line has been laid north-westerly to the railway grounds.

In staking out the lots to the south of Basket Lake I paid no attention to this water pipe, but I presume the railway people will have the right of way

through the town lots.

The intake pipe at Armstrong Lake is just west of the side line between lots 4 and 5, concession 5, and 1,534 feet south of the original post at Basket Lake.

That portion of lot 5, concession 6, laid out is altogether the most suitable for building lots, having a gradual slope to the south from the high land on the north.

The part of lot 5, concession 5, laid out south of Basket Lake is also fairly well situated, rising to the south from Basket Lake and Black River. These two blocks of lots comprise all that is really suitable for a Townsite, but having half a day at my disposal before moving on to Kenora, I laid out 21 lots on lot 6, concession 6, as shown on plan. These, however, are not likely to be taken up as building sites for some time to come. The flat of land between the railway lands and Black River is covered with water every spring and therefore unsuitable for building purposes.

A number of the posts used were cedar that I brought from Sioux Lookout, and iron posts left over from Sioux Lookout were planted at points indicated on the tracing of plan. The remainder of posts required were made from banksian pine, being the most suitable timber to be found.

All posts were marked similarly to those described in the report of Sioux Lookout.

After our railway experience on the 15th July, being 20 hours on a flat car coming 117 miles, we were pleased to have the privilege of getting to Winnipeg River on the 3rd of August by row boat and canoe via Black River, and the same evening reached Kenora by small steamer, where the survey may be said to have terminated.

Accompanying the report will be found Plan of Survey, with tracing of same showing iron posts, also pay list, statement of transport and travelling expenses with vouchers and account, all in triplicate.

The magnetic variation was found to be 10 degrees 25 minutes East.

I have the honour to be,

Sir.

Your obedient servant.

(Signed) Alexander Niven, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 38.

SURVEY OF THE TOWNSITE OF MATTAWISHQUIA, DISTRICT OF ALGOMA.

NORTH BAY, July 15th, 1911.

SIR,—I beg to report the completion of the survey of the Mattawishguia Townsite at Mileage 232, on the National Transcontinental Railway, performed under instructions from your Department, dated May 22nd, 1911.

Our party left here on the 30th of May, and returned on the 22nd of June. Some inconvenience was experienced by our party at the western end of our trip, both going in and coming out, due to inefficient, irregular service on the construction trains, and to a series of accidents on the line.

According to instuctions, I consulted with Mr. A. J. McDonald of Cochrane, as to the most suitable land to subdivide, and our decision alters somewhat the subdivision as laid out on the projected plan.

North of the right of way no further land has been reserved than has been subdivided, while on the south side all the land has been reserved between the right of way and the river.

The soil is a light loam, free from boulders and rock. The land has a natural and very gradual slope riverwards, giving good drainage. There is no rough or broken land in the Townsite, hence every lot is available for building. The timber is mainly black spruce of small dimensions, while on the higher land are white woods and white birch.

The only buildings on the Townsite are the engineers' camps at the southeast end and a log stable on lot 137. In front of lots 130-140 are a number of buildings on the station yard, comprising a store, stopping place, hospital, contractor's headquarters, etc. This is the most desirable location for building purposes.

Posts were planted at the front angles of every lot, and at rear angles where the same occurred on side streets. The posts were all made of spruce timber, while at certain locations iron bars were driven to preserve the more important points. The outlines of the townsite were run, thoroughly blazed and posted at the various angles.

I am indebted to the engineer in charge of Residency 22, for his notes of a winter traverse of the Mattawishguia River, the obtaining of which rendered a second traverse unnecessary.

Accompanying this report are the plan, and tracing of the Townsite, and triplicate returns of all expenses in connection therewith, all of which is respectfully submitted.

I have the honour to be.

Sir.

Your obedient servant.

(Signed) H. M. ANDERSON.
Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto. Appendix No. 39.

SURVEY OF THE TOWNSITE AT LOW BUSH RIVER, DISTRICT OF NIPISSING.

NORTH BAY, ONT., September 30th, 1911.

SIR,—I beg to report completion of the survey of the Townsite at Low Bush River on the National Transcontinental Railway, performed under instructions

from your Department, dated August 11th, 1911.

The soil is a light loam, free from boulders and rock, and with no rough or broken land, hence every lot is suitable for building purposes. The land is for the most part quite well drained, with a gentle slope riverwards. In some few places, as along the concession line, however, the land is wet and deeply covered with moss, though still capable of being drained. The timber for the most part consists of small black spruce, while on the higher land are poplar and white birch.

The temporary station is located mid-way between the two bridges. This will, in all probability, prove to be the most central location of the Townsite, and the business section will spread out over lots 201-222, etc. The choicest residential section is to be found up around the Residency buildings on the east side of Circle River.

A number of buildings occur on the long tongue between the two rivers and south of the right of way; and a considerable clearance lies adjacent to the right of way on the easterly shore of Circle River.

All lots were posted at both front angles, and at rear angles where the same occurred on an avenue, in every case the posts being firmly driven. The posts were all made of sound spruce, 24 inches long, well faced. The numbers were carved on same with a timber scribe. The posts at street corners were also carved "R." At certain positions iron posts were planted. These were plainly marked with a cold chisel, and alongside of them were planted wooden posts, also marked. The positions of these posts are indicated on the accompanying tracing and recorded in the notes.

Accompanying this report are the usual returns consisting of plan, tracing, field notes, list of lots, etc., all of which are respectfully submitted.

I have the honour to be.

Sir,

Your obedient servant,

(Signed) H. M. Anderson. Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 40.

REPORT OF THE SUBDIVISION OF THE VILLAGE PLOT OF WALDHOF, DISTRICT OF KENORA.

KENORA, June 26th, 1911.

SIR,—I left Kenora by morning train for Waldhof Siding, where I arrived about noon. I engaged men for the following morning at \$2.50 per day, including board, and a chainman at \$2.75 per day. Then I looked up posts and went to the sawmill to order sawn posts. I took the chainbearer with me. We found the trail to the mill very wet and swampy. We took the colonization road back which increased the distance, but was drier and better walking.

On Thursday morning, the 8th, I ran northerly at right angles to the straight part of the north boundary of the Canadian Pacific Railway; on this line at the right distances I ran the boundaries of the streets easterly and westerly, parallel to the straight part of the north boundary of the Canadian Pacific Railway, to comply as nearly as possible, owing to the curve in the C. P. R., with the projected plan accompanying the instructions.

The land ascends gradually from concession 1 towards the north. The soil is sandy from southwest corner of lot 8 but changes to sand and gravel to the north and east.

The timber is small jack pine from 4 inches to 6 inches in diameter, in places scattered and not much underbrush, and if near a town or city would form ideal outing or picnic grounds.

I found no buildings on the lot except one intended for a blacksmith shop, and another with the frame up. They are both south of the Canadian Pacific Railway, and are both on West Street near lots 68 and 40.

The men who were working with me expressed a wish to have some of the lots set out for a park and athletic grounds, and mentioned the block bounded by George and Grey and Edward and Beresford streets as very suitable.

I found the posts at the south-west corner and at the intersection of the west boundary with the north boundary of the Canadian Pacific Railway in position, but those at the south-east corner are all gone, either burnt or removed with material from the borrow pit. The posts at the south-west corner of 7 are also gone, with material from the ballast pit.

The only swampy land on the Town Plot is that mentioned in the township field notes at the southwest corner of eight. Very little of it is on the lots. Robert street takes nearly all of it.

I did not give the subdivision a name. The whole of Waldhof Siding is on lot 9, and no name was mentioned in the instructions.

I have the honour to bc,

Sir,

Your obedient servant,
(Signed) Edmund Seager,
Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 41.

SURVEY OF THE MATTAGAMI RIVER TOWNSITE, DISTRICT OF SUDBURY.

NORTH BAY, ONT., October 7th, 1911.

SIR,—Herewith I beg to present my report on the survey of the Townsite at Mattagami River, on the National Transcontinental Railway, performed under instructions from your Department, dated July 26th, 1911, and supplementary instructions dated August 11th, 1911.

The soil is a light loam, free from boulders and rock, and with very little broken land; hence nearly every lot is available for building purposes. The land is for the most part quite well drained, there being at all times a gentle slope riverward. The timber is mostly a general mixture of balsam, birch, spruce and poplar in the order named and of a size ranging from 4 inches to 8 inches. Along the river bank and the ridges the timber is larger, with poplar predominating; while in the lower parts the main timber is black spruce, 3 inches to 5 inches. Satisfactory and pleasing evidences of the soil's possibilities were to be seen in the garden growth at the Residency,—there being a splendid showing of all kinds of garden vegetables and a profusion of domestic flowers. Hay and oats were also seen on the work, of a height and head worthy of note.

The Railway passes through the Townsite at a considerable elevation, more particularly from 3rd Avenue westward. From an inspection of the ground, it would appear that the most suitable and probable site for the business section, would be that portion of the Townsite lying East of the River and preferably North of the Right of Way. The best residential section is in the vicinity of the Residency Buildings on the westerly side of the river.

All lots were posted at both front angles, and at rear angles where the same occurred on an avenue; in every case the posts being firmly driven. The posts were made of clear cedar or pine 24 inches long, well faced and the numbers carved thereon with a timber scribe. The posts at block corners were also carved R in addition to the number of the adjacent lot. At certain prominent positions iron posts were planted; these were suitably carved with a cold chisel and a carved wooden post planted alongside. The locations of these iron posts are indicated on the tracing and recorded in the notes.

Accompanying this report are the customary returns consisting of plan, tracings, list of lots, etc., all of which are respectfully submitted.

I have the honour to be,

Sir.

Your obedient servant,

(Signed) H. M. Anderson. Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

Appendix No. 42.

TRAVERSE OF SESEKINIKA AND KENOGAMI LAKES AND SURVEY OF ISLANDS THEREIN,
DISTRICT OF NIPISSING.

ELK LAKE, October 23rd, 1911.

SIR,—Under instructions from your Department dated July 31st, and August 21st, I have surveyed those parts of Sesekinika and Kenogami Lakes, lying within the Township of Grenfell, and the islands therein, subdividing the larger islands into parcels suitable for summer resorts. I have also traversed the Blanche River from Kenogami Lake to the Temiskaming and Northern Ontario Railway. Along the shore of Sesekinika Lake at distances averaging about a mile, I have marked suitable trees at prominent points W, W1, W2, etc., and along the shore of Kenogami Lake at like intervals have planted posts marked P1, P2, to P6. I continued these posts along the Blanche River at intervals of about half a mile, marking them P6 to P11.

I found no surveyed mining claims to connect with my survey of either lake or the river, though many unsurveyed claims are staked in the neighborhood of all.

Sesekinika Lake contains twenty-three islands, varying in size from one-tenth of an acre to over two hundred acres. Of the largest island only about fifty-three acres are within the township of Grenfell. The largest island wholly within this township contains about eighty-three acres. With the exception of two or three very small islands all are well timbered with spruce, birch, jack pine, poplar and balsam, the largest island A2, having many spruce, birch and poplar from 18 to 24 inches in diameter.

All the islands consist of an outcrop of schistose rock covered very lightly with soil, there being, except in a few isolated spots, practically no arable land on the islands. Nearly all are suitable for summer resorts, some, as described in schedule accompanying this report, being very desirable.

Along the east shore near the railway I found land suitable for only two lots. As shown on plan and field notes most of the land between the railway and the lake has been recently burned over and consists now along the shore of nearly bare rock covered with fallen timber. Probably in a few years it will be sufficiently grown up with underbrush to hide the present deformity. Otherwise the beauty of the shore and the islands is all that could be desired. The only serious defect to this lake as a summer resort is that the water is not at all clear, being always yellow and at times almost dirty. It is, however, well stocked with pike and pickerel.

The shore of the large islands, while offering many of the most desirable sites for cottages, is totally unfit for a roadway, consisting in many places of precipitous rock or steep incline with little or no earth for grading. The only road allowance I left is between parcels 2 and 3 on island A1, to give access from the water to parcel not bordering on the lake.

In Kenogami Lake the small islands are all well wooded and offer suitable locations for summer resorts. The large island is mostly brulé, small second growth jack pine, spruce, and poplar covering much of it, with several large white and red pine escaped from the fire. There are in both parcels into which

I have divided it several good locations for cottages. Most of the shore of this lake is schistose rock and conglomerate and is largely staked for mining claims, as is also the country along the Blanche River.

I have the honor to be,

Sir.

Your obedient servant,

(Signed) A. D. GRIFFIN. Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 43.

SURVEY OF DOG AND OTHER LAKES AND THE OBA RIVER, IN THE DISTRICT OF ALGOMA.

TORONTO, Ont., Oct., 1910.

SIR,—We have the honour to submit the following report of the survey of Dog and other lakes and the Oba River made by us during the past summer months, under instructions dated June 9th, 1910, the said survey comprising the north shore of Dog Lake, from Missanabie Station on the main line of the Canadian Pacific Railway west of Sudbury, westerly as far as the Steel Girder bridge over the Lochlomond River, at Sudlow Siding. Thence the river and lakes connecting Dog Lake with Lake Wabatongashene, viz.: The Lochlomond River, Lochlomond Lake and MacNamara Lake: thence Lake Wabatongashene, and over the height of land and down Portage Creek into Oba Lake, and from Oba Lake down stream of the Oba River as far as the portage known as Pine Portage, into Kepinagogami Lake.

We left Toronto, with two men, on the evening of June 12th for Sudbury. After ordering supplies and organizing our party, we proceeded on June 15th to Missanabie with a party of nine men, including a timber ranger, Mr. W. B. Thomson of Orillia.

The remainder of the month of June and up to July 15th, we were engaged in the triangulation and traverse of Dog Lake, Lochlomond Lake, MacNamara Lake and the Lochlomond River. From the commencement of the survey until July 6th, we experienced considerable difficulty in sighting on the lakes, owing to the dense smoke of bush fires to the west of us, and at times found it impossible to see our pickets. A heavy rain, however, on July 6th cleared the atmosphere and removed this difficulty. The latter half of July and the month of August was spent in the triangulation and traverse of Lake Wabatongashene and its connection with Oba Lake. Most of the islands in this lake are shown on the accompanying plan as either sketched or as actually touched by the survey. A few, however, may have passed unnoted during the survey. From September 1st

to September 15th, we were engaged triangulating and traversing Oba Lake. Most of the islands were also located as those aforesaid. From September 15th to October 8th we were engaged in the traverse of the Oba River as far as Pine Portage, and also down the east branch of the Oba River eight miles, tying on one of O.L.S. T. B. Speight's meridian lines run this season.

Levels were taken at all falls or rapids capable of development and the discharge of the streams determined approximately. Small and long rapids, the

fall of water was merely estimated.

October the 10th, 11th and 12th, were spent on the journey out from Pine Portage to Missanabie Station.

The Government equipment, canoes, tents, blankets, cookery, etc., were stored with the Hudson Bay Company at Missanabie, and the receipts collected for the same.

During the months of August and September there was considerable wet weather, and this, together with the many gales on the lakes, hindered, to some extent, the progress of the survey.

The survey was left unfinished owing to the summer season closing. In our

opinion, there is sufficient work left for a single party another season.

Wooden posts were planted at prominent points on the lakes and at every mile or thereabout on the river. Where possible, cedar, or the most durable trees available, were cut off from 2 to 3 feet above the ground, squared and bevelled at the top and scored with a marking iron on the side facing the water, with the designated number of the post. Where impossible to square a tree, a post was made, at least 5 inches square and from three to four feet in length, of the most durable wood available, marked in the same manner as aforesaid and planted firmly in the ground and with material convenient. Stone mounds were also built around the post. Bearing trees were also taken at monuments exposed to destruction.

The lakes were first triangulated from chained bases. A five-chain tape was employed in the chaining of the bases. The shore line was filed in with stadia and azimuth readings with transit. On the river magnetic bearings were also taken as a check on azimuth readings. When rapids and waterfalls were encountered, necessary lines were cut and blazed around the river and posts planted. Astronomical observations for time and azimuth were taken as often as opportunity permitted, and the direction of lines are in accordance therewith. Observations with their calculations are recorded in the appendix of this report. The field notes of the survey of the lakes have been plotted to a scale of ten chains to the inch; the Oba River to a scale of twenty chains to the inch, and a general plan to a scale of two miles to the inch. Tracings of the same accompany this report.

GENERAL FEATURES.

Judging from the shores of the three lakes, Dog, Wabatongashene and Oba, the land is for the most part useless for agriculture. At the mouth of the Oba River we struck the southerly limit of the clay belt, and from this point down stream to Kepinagogami Lake, good agricultural land was in evidence, From Post A 100 down to Pine Portage A 19, the country is very flat; in no place except at rapids between B 5 and B 6 did the banks of the river exceed three feet above high water mark. A good example of the flatness of the country is found at the big bend of the Oba River B 8, where the water at that point divides, part flowing south-westerly into Kepinagogami Lake, and the other

part flowing north-easterly into Missanabie River. Another strange phenomenon, some of the creeks between B 8 and B 17 flow from the river. I presume they unite with the river at some point further down the river. The bed of the river is of hard clay. The shores and bed of the lakes are rocky in most places with occasional sand beaches.

CLIMATE.

The climate last summer was all that could be desired for agricultural pursuits, no frosts of any severity being experienced during July and August. We had several frosts, however, in the latter part of September and October.

TIMBER.

The timber is reported on fully by the timber ranger, Mr. W. B. Thomson of Orillia, and further remarks are unnecessary.

MINERALS.

No economic minerals were discovered, nearly all specimens examined on Wabatongashene and Oba Lakes being granite rocks of the Laurentian formation, with occasional outcrops of green schist.

GAME.

Large game, such as moose, caribou and deer were not as plentiful as would be expected. We saw an occasional moose, but no signs of caribou or deer. Bear were seen in the Oba Lake District. Traces of fur-bearing animals such as mink, beaver and marten were found, but in our opinion, the country is almost hunted out. Small game such as rabbit, partridge and duck are plentiful. Abundance of fish—pickerel and pike—were caught by our party, weighing as much as twenty pounds, although they averaged three to four pounds. It is claimed that the lakes also contain whitefish. Local Indians told us that speckled trout were found in many of the smaller streams and in parts of the Oba River. There is good trout fishing at Trout Rapids at post A 78, at low water.

WATER.

The water in the lakes south of the height of land is fresh, clear and soft. Oba Lake and Oba River have that dark color due to vegetable matter, which most of the rivers have in Northern Ontario.

Water-power is reported on in detail in the field book.

We have the honor to be,

Sir.

Your obedient servants,

(Sgd.) Paulin & Bush.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 44.

ALGONQUIN NATIONAL PARK.

ALGONQUIN PARK P. O. December 24, 1911.

The Honourable The Minister of Lands, Forests and Mines, Toronto, Ont.

HONOURABLE SIR,—I beg to hand you my annual report for the fiscal year ending October 31st, 1911, on the Algonquin National Park of Ontario, of which I have the honour of being in charge.

The Park, as no doubt you are aware, is situated about two hundred miles north of the City of Toronto, in the District of Nipissing. It comprises some thirty-one townships, wholly or in part, containing an area of about one million three hundred and twenty thousand acres, and is timbered with birch, maple, beech, hemlock, cedar, spruce, white birch, tamarac and balsam. There are still large blocks of choice red and white pine, while in some sections black cherry is found reaching a diameter of sixteen inches. There are some 2,000 lakes, large and small. Some of these rank among the larger of the inland lakes of Ontario, such as Cedar, Great Opeongo, Tea Lake and others.

One of the most notable features of the Park is the fact that six important rivers take their rise here, namely, South River, Madawaska, Amable Du Fond, Petewawa, Little Nipissing and the north branch of the Muskoka. The value to the Province of the conservation of these water supplies can scarcely be estimated. The depth of the Park north and south is 56 miles, while its breadth east and west is 48 miles. The average elevation is 1,500 feet above sea level, making it an ideal health resort, and thousands of people from all over Canada and the United States avail themselves of it yearly.

There are two large well-equipped hotels, one built and operated by the Grand Trunk Railway, the other by Mr. L. E. Merrell; the former is situated at Cache Lake, the latter seven miles west. The Park headquarters are also at Cache Lake, Algonquin Park P. O.

The object of the Park, besides conservation of the water supply and the preservation of the timber, is to provide a breeding place and protection to all kinds of game, and a health resort for the people of the Province. That these objects have been attained is evident on all sides. The Park is annually becoming more popular, not only for the excellent speckled salmon trout and bass fishing, but for purposes of rest and health.

Game of all kinds has very much increased. Deer are so abundant that they can be seen from the hotel verandahs in numbers. Beaver, too, are very numerous, and their annual increase must be several thousand. Otter, mink, marten, muskrat and fisher are also here in great numbers; in some sections the fox is very plentiful. Of birds we have the ruffled grouse, the spruce partridge and several smaller game birds. The capercailzie introduced some years ago are also in evidence, several coveys of young birds having been seen during the past year. This being the largest of the grouse family will be an important addition to our game birds. Ducks are becoming much more numerous, and thousands of them could be seen in our large marshes last fall.

A considerable revenue has been derived from fishing licenses, etc., and this will very much increase each year as the Park becomes better known.

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The amounts collected here during the past year, not including furs sold, are as follows: For fishing licenses \$1,193.12; for rent of cottage and camp sites \$305.00 (this does not include rents and license fees paid direct to the Department); fines upon six convictions for illegal trapping \$175.00; sale of shelter house at Canoe Lake (no longer required) \$100.00; old lumber from camps, \$40.00, making a total of \$1,813.12.

Our staff consists of a superintendent, twenty-four rangers and a housekeeper. The men travel in pairs, having a given territory to cover, their duties during the hunting and trapping season being to patrol the section under their care for the prevention of illegal hunting and trapping. During the remainder of the year they cut portages, improve streams, build shelter houses, etc. They at all times act as fire rangers.

Regarding fires, I am glad to report that although many fires were started, principally by lightning and the railway trains, we succeeded in getting them under control before much damage was done.

We have built eight new shelter houses, all of which are substantial sided log buildings, with the exception of the one at Joe Lake, which is a well finished clapboard building, fitted with telephone connection with the hotel, the stations at Canoe and Cache Lakes, and headquarters. Joe Lake is an important point, being on the main waterway, and the telephone in cases of bush fires or accident will be a great advantage. At headquarters all the waste land to the west of the building has been cleaned up, also a great deal of the slash left by the Munn Lumber Company, this being absolutely necessary as a fire protection on the limits recently acquired by the Government from this firm.

An ice house and cold storage has also been built at headquarters. For two years past we have taken out a quantity of fur, principally beaver. This has been sold by tender in Toronto, bringing a good price. During the past year, nine live beaver were disposed of, 402 beaver skins, 10 otter, 8 marten, 18 mink, 31 muskrats. 1 fox, and 1 ermine, realizing in all \$3,340.00.

Wolves are still numerous in the Park, notwithstanding that our men got fifty, principally females, during the year, and killed at least an equal number that they did not get owing to the snow falls covering them up before found. I attribute the large number of wolves to the fact that they come in from other sections, owing to the abundance of food to be found in the Park. Every possible effort should be made to rid our woods of these pests, which kill deer in hundreds. Several were killed during the past year within a mile of headquarters.

Fishing was good during the past year, and general satisfaction was expressed by all visitors, who do not hesitate to pronounce the Park the best fishing grounds now to be found in America. I would, however, recommend stocking Cache, Cranberry and White Lakes, as these being within easy reach of the hotel provide sport for those who cannot reach more distant waters.

The limits recently purchased by the Government from the Munn Lumber Company are a great acquisition to the Park, being largely covered with fine hardwoods and young pine. The lakes also are excellent for fish, and have an abundance of speckled and salmon trout, as well as small-mouthed bass, the latter having stocked these waters from the Park, where a few years ago they were introduced with great success. A large quantity of salmon fry was put into Source Lake two and three years ago, and last season a few choice specimens of this most gamey fish were taken.

The addition of the Munn Lumber Company's limit to the Park also com-

pletes a very important waterway and adds very much to the ease of patrolling this section.

We have in the Park three large summer camps of boys and one of girls, the Long Trail camp for boys on Joe Lake; Prof. Brower's camp for boys on Cache Lake; the Bordentown Military Institute on Lake of Two Rivers, and Miss Case of New York, with a school of fifty girls and teachers on Cache Lake.

Considering the great number of people scattered all over this vast territory in canoeing parties during the summer months, we have very little trouble from bush fires, and the Park laws are with few exceptions well observed, our principal trouble coming from the lumber camps and outside trappers.

I have the honour to be, Sir,

Your obedient servant,

G. W. BARTLETT,

Park Superintendent.

Appendix No. 45.

RONDEAU PROVINCIAL PARK.

MORPETH P. O., December 26, 1911.

The Honourable The Minister of Lands, Forests and Mines, Toronto, Ont.

SIR,—I have the honour to submit this my report as caretaker and ranger of the Rondeau Provincial Park for the year 1911.

The marsh grass that we had cut last fall and with which we covered the sandy places around the pavilion (where so much traffic in the picnic season wore the sod off and cut deep into the sand) served an excellent purpose; it seemed to hold the moisture, and the sand remained quite firm or packed under the coarse grass. Wagons and automobiles can run anywhere on this part without cutting into the sand as they formerly did. It was pleasing indeed to note the favorable remarks from the public visitors in regard to this work. It should have a fresh covering of grass each year until a natural top is formed that will seed down with grass.

The Park dock is in good condition and has afforded a great deal of pleasure to visitors, but owing to the extreme lowness of the water this season, it has been difficult for the small launches to make their way into the lagoon beside the low dock to tie up, as the entrance to same is very shallow, being partially filled up with sand.

The gravel road leading into the Park has been in fine condition and makes a good speedway for automobiles and other vehicles. It will require another light coat of gravel to put it in good condition for next year. The continued wet weather recently has softened it in places and it is cut up some.

As a summer resort this place is becoming more popular every season. The picnic season opened much earlier than usual, and continued longer than ever before. There were very few days throughout the season without a picnic on the Park grounds. The country roads and the Park road being dry and in excellent condition most of the season, encouraged the automobile traffic. Some days they numbered up to 20 and 25 machines. Up the south road through the Park forest seems to be a favorite run for them; the people enjoy seeing the deer (which number up into the hundreds) in their natural haunts, as well as the great variety of timber and shrubbery, the black squirrels in the trees and the cotton-tails jumping through the bushes.

The new bath house built for men on the lake shore of the Park this season has been used a great deal, and is very much appreciated by the people summering in their cottages and also by the picnickers; the bath house built for the ladies two years ago was also kept busier than ever. The Chatham and Blenheim Baden-Powell Boy Scouts, numbering about 50, were in camp on the Park for the greater part of two weeks, and made the place lively. They had drill practice each day and entertained visitors in the pavilion several times; had an afternoon of sports on the water, also foot racing on the green in front of the pavilion. Their stay was enjoyed by those who visited the Park while they were here. This has proven to be one of the best seasons for wild ducks in years on the bay contiguous to the Park.

Old shooters say that the blue bill were never known to be so numerous here before, and that more ducks were killed and taken away than for many years past.

The wild partridge and quail in this forest are not very plentiful; their natural enemies are too numerous for them to thrive well; the hawk, skunk, weasel, etc., are hunting for a living, and make it hard for these little game birds to survive at all.

The wild turkeys that the Government had placed on the Park last spring have not done well. At one time, early in the season, there were three old birds and eighteen young, and through destruction from hawks, eagles, owls, etc., and sickness during the summer, their number has been reduced to one cock and two hens. When the young were able to fly up to a perch a few feet off the ground they were liberated into the forest and picnic grounds, but they seemed to pick up something that causes them to get sick and die. We had the same experience with wild turkeys several years ago on the Park.

The wild geese have increased in number in the enclosure this season.

The red deer in the open Park are becoming so numerous that they are straying off the premises, and are accused of damaging crops. They are also injuring the young pine and cedar on the Park, and I have recommended that some steps be taken to reduce their number.

The deep well of water that was secured a little over a year ago has proven quite satisfactory so far; by pumping (with gasoline engine) two or three hours each day it will supply the picnic grounds as well as the Park headquarters with plenty of pure drinking water, which will add to the attractiveness of the Park. The latest improvement is the building of a new road through the Park forest, beginning on the picnic grounds where the gravel road into the Park ends, and continuing through the forest a distance of over three miles, intersecting the old Lake Shore road (the road to the fisheries) at a point opposite Cull and Shippey's fishery, thus forming a belt-line driveway through the best wooded part of the forest. The new road is underbrushed to a width of two rods, and when com-

pleted, all unsightly and leaning trees will have been removed. The road bed along the centre will be cleared of all trees, roots, etc., and levelled, leaving a clear drive road of about 16 feet wide. On the upper or southern end where it crosses over a number of sloughs, it was necessary to use a good many of the trees that had to be cut to make the roadway in laying corduroy, which was then covered with marsh grass to a depth of one foot, and the grass in turn was covered heavily with sand and leaf or vegetable mould. To make a permanent drive road, it was necessary to build up these low places above the high water mark in the spring. We expect to have the whole road in condition for traffic this coming season.

Before closing my report I wish to say that Mr. Orendorf handled the refectory

in a satisfactory manner, catering to the wants of the public visitors.

Mr. Weir, who has the privilege of providing boats, etc., for Park visitors, is kept very busy and is giving satisfaction.

I have the honour to be, Sir,

Your obedient servant,

ISAAC GARDINER,

Park Superintendent.

Appendix No. 46.

List of Persons holding Cullers' Licenses, issued under the Ontario Cullers' Act, up to 31st October, 1911.

Name.	P. O. Address.	Name.	P. O. Address.
Anderson, M. M	Almonte	Buchanan, Robert	Coldwater
Allan, James D		Beck, Jacob Frederick	
Appleton, Erwin B		Bird, Joseph Manly	
Albert, Andrew		Boyd, John F	Thessalon.
Adams, J. Q	Longford Mills.	Brandon, Martin W	Peterborough.
Anderson, Patrick J	Campbellford.	Bell, John C	Peterborough.
Anderson, J. C	Gravenhurst.	Bartlett, George W	Warren.
Allan, Alfred	Ottawa.	Brown, Silas	Klock's Mills.
Allen, R. A	Bannockburn.	Boland, W. G	
Aikins, Geo. M	French River.	Baulke, George R	
Appleby, Ridley	Katrine.	Bouchey, Arthur	
Adams, James M	Sault Ste. Marie.	Buchanan, Mark	Trout Mills.
Aylward, James		Barrett, W. J	Thessalon.
Archibald, John L		Bromley, Thomas	
Austin, Wm. G	Renirew.		Admaston.
Anderson, Charles	Cartier Current.	Breen, Bernard Buie, Dougal	Providence P
Anderson, John Adair, Thomas Albert	Cartier.	Baker, Thomas	Blind Divor
Anderson, J. G	Alnena Mich	Blais, Felix	Hull One
Alexander, Samuel	Arden	Balsdon, George	Keewatin
Adams, Wm	Westmeath.	Bromley, W. H	Pembroke.
Arkle, George	Kenora.	Bowers, Isaac	Little Current.
Armstrong, Jas. Theodore.	McKellar.	Brown, Thomas	Barrie.
Armstrong, Thomas J		Bass, Walter R	W. Huntingdon.
Acheson, Ira M	Westmeath.	Bates, Robert	Kenora.
Albert, Alfred E	Ottawa.	Binnie, Thomas	
Alma, John E	Hawkesbury.	Blair, William	
Adams, George A	Longford.	Bick, Thomas	Bobcaygeon.
Ansley, John Albert	Thessalon.	Burke, John Thomas	Midland.
Ansley, John Jenkins		Buchan, Sterling	L'Orignal.
Ainslie, Alexander		Brown, Joseph A	Spanish.
Apleton, E. A		Baird, P. C	Rainy River.
Arnill, William Adams, Fred		Brill, J. W	Mine Centre. Arnprior.
Alexander, R. Harvey		Beattie, Arthur W	Ottawa.
Alexander, J. Albert	Spragge	Brock, H. S Benson, John Bird	Midland.
Ainslie, Donald McF	Whitestone	Brennan, Rich'd Lawrence	TD / 1
Ansley, William	Thessalon.	Brown, Hugh Riside	Huntsville.
Argue, W. A		Bryan, Frank	Keewatin.
Almers, John	Kenora.	Bennett, Edward Clinton.	Ahmic Harbour.
Allard, Telesphore Jos		Blaine, Harvie Thomas	Orillia.
		Barrett, Thomas	Barrie.
Brophy, Michael Patrick.	Massey Station.	Bickell, James Manuel	Sault Ste. Marie.
Boland, Abraham	Cartier.	Buisson, William	Sudbury.
Brown, Singleton		Borrett, James A	Sault Ste. Marie.
Barry, Thomas James		Bliss, C. Lidden	Sudbury.
Blanchet, Paul Fred'k	Donny Cound	Bray, James	Kinmount.
Bird, W. S	Crovenburgt	Bremner, George	Arnprior. Pembroke.
Bayley, James T Bell, Henry	Ottowo	Bromley Samuel	Fitzroy Harbour.
Beach, Herbert Mahlon	Ottawa.	Brown, A. C	Opimicon, Que.
Barry. Thomas	Millbridge	Berlinquet, Julius Blastorah, Fred L	Harwood
Beatty, W. R	Parry Sound	Burns, Clifton H	Little Current.
Brooks, Frederick Wm	Mackay's Station	Beaumont, Ernest	Parry Sound.
Brown, Robt. D	Port Sidney	Beattie, Alex	Whitney.
Breed. Arthur G	Penetanguishene.	Brennan, Reginald	Gravenhurst
Barnes, Thomas Geo. Lee.		Boyd, George	

			,
Name.	P. O. Address.	Name.	P. O. Address.
Bissell, Geo. Thomas	Trenton.	Campbell, J. M	Bracebridge.
Baxter, Richard	Deseronto.	Campbell, Robert	
Breeaugh, Edward	Deseronto.	Clairmont, Joseph	Campbellford.
Boyd, Geo. A	Thessalon.	Clarkson, Robert J	Parry Sound.
Buchan, Frederick	Arnorior		
		Carruthers, Aaron	
Bradbury, Kerwood		Calder, Wm. J	Charanhund
Belanger, John B		Chew, Joseph	
Bird, J. F.	Bracebridge.	Cole, James Colin	
Beddome, W. E	Dryden.		
Barrett, Patrick	Dembroke	Cain, Robert	Midiand.
Brundage, Alfred W	Pembroke.	Crawford, Stephen W	Thessalon.
Brougham, Thomas	Eganville.	Cochrane, George	Peterboro.
Blair, Robert I	Arnprior.	Coburn, John	Lingsay.
Benson, John W	Sturgeon Bay.	Crowe, Nathaniel	
Beck, Chas. M., Jr	Penetanguisnene.	Cameron, Alexander	
Beatty, W. J	Coldwater.	Chrysler, Frank R. L	
Burns, C. W., Jr	South River.	Callaghan, Thomas, Jr	Campbellford.
Bell, John Henry	Burk's Falls.	Carson, Hugh	Kenora.
Berry, Harold	Labelle, Q.	Calder, George	
Black, George	Barwick.	Callaghan, Dennis	
Bettes, John Hiram	Muskoka Mills.	Corrigan, Robt. T	
Brady, John	Renfrew.	Cameron, John H	Kenora.
Brown, James	Buckingham, Q.	Carson, Melvin	Little Current.
	Blind River.	Cameron, John K	
Bertrand, Allan	Nairn Centre.	Cassidy, William	Little Current.
Brinkman, Alex. B	Sault Ste. Marie.	Coons, Geo. Washington	Peterboro.
Black, Jacob	Barwick.	Chisholm, Geo. Leopold	Sault Ste. Marie.
	Arnprior.	Clark, Wm. J	Birkendale.
Bromley, William	Westmeath.	Carr, Herbert E	
Bissell. Hartie	Trenton.	Cochrane, Alfred L	Muldoon, Que.
Brown, Robert	Starrat.	Campbell, George	Fort Frances.
Beaton, Hugh	Waubaushene.	Chalmers, George James	Peterboro.
Bailey, Arthur	Parry Sound.	Caverly, David Charles	
Burd, James Henry	Parry Sound.	Campbell, Archibald J	
	Orillia.	Close, John L	
	Renfrew.	Carmichael, Donald	
	Huntsville.	Carty, John	
Brown, John	Rockdale.	Cleary, Patrick M	
	Sundridge.		Callender.
	Klock's Mills.	Cushing, John J	Davidson, Que.
Bromley Edw. H	Pembroke.	Crebo, William	Thessalon.
22.02.200	Byng Inlet.	Cullen, Michael J	Massey Station.
Buee, Neil	Spanish Station.	Cuthbertson, William	
	Spanish Station.	Carss, Percy	
	Bryson, Que.	Coghlan, Michael	
	Ottawa.	Cameron, Alexr. Gordon.	
	Kenora.	Cassaday, W. W.	
	Deseronto.	Carter, Robert E	
2002, 202246		Coleman, Jos	Baysville.
Blastorah, Bernard	Harwood.	Cardiff, Geo. McDougali .	Sudbury.
Brannan, William H	Pembroke.	Cameron, W. D.	Kenora.
Bromley Thomas	Webbwood. I	Crandali, F.	
Barr, J. C	Fort Frances	Campbell, James R	Eganville
Bradley, J. M	Mine Centre	Campbell, John A	
Burns, Dominick	Webbwood.	Caillier, Hyacinth	
Blaikie, Campbell D	Fort Frances	Chamberlain, Thomas	
Bury, Henry J	Stratton.	Cooper, David Allan	
~ u., i.u., u		Cox, Henry	
Campbell, Robert John	Fiinton.	Currie, James	
Carpenter, John A	Arnnrior	Clarkson, A. E	
Campbell, Alex. J.	Trenton	Clairmont, E	
Carson, James	Bracebridge	Cameron, W. F.	
Carson, Games		Comme 51 041, 11 . E	Boon Day.

Name.	P. O. Address.	Name.	P. O. Address.
Connolly, David	Gravenhurst.	Durrill, John W	Ottawa.
Campbell, P. C	Sault Ste. Marie.	Dickson, John	Sundridge.
Cadenhead, Alexander	Midland.	Dickson, James L	Michipic'ten H'r.
Carpenter, R. J	Arnprior.	Dobie, Harry	
Christie, William Pringle.	Severn Bridge.	Deacon, Charles	Sault Ste. Marie.
Campbell, C. V	Sault Ste. Marie.	Danter, R. W	Parry Sound.
Clegg, Samuel	Peterboro.	Doyle, T. J	Eau Claire.
Clairmont, William L		Dobie, Alexander R	
Cook, Sydney P. W		Darling, J. M	
Corrigan, John	Baysville.	Dillon, John	
Chalmers, Alexander M	Peterboro.	Durrell, Jos. Nelson	
Charlton, George A	Collingwood.	Durrell, John	
Cahill, Thomas	Nosponsing.	Donally, Richard S Devine, William	Sudbury.
Chew, Manley	Midianu.		
Cooper, James Eddly Cook, Reinhardt	South Biver	Durrill, William Draper, Patrick	
Crowe, Cecil	Robesvacon	Davis, J. P	
Callaghan, Dennis	Tronton	Dale, John Alexander	
Collins, James	Barryville.	Dinsmore, Chas. L	
Claffey, Edward D	Fort William.	Drum, Patrick	
Coyne, Phin		Durham, Edgar S	
Constantine, Eudore		Duquette, Chas	
Cameron, Ewan	Gordon Lake.	Davis, William Albert	
Campbell, Daniel N	Buckingh'm, Que.	Dickson, Robt. Alexander.	
Canniff. R. W	Kenora.	Dawkins, John	
Cassidy, S. C	Dunchurch.	Doxsee, James E	Gravenhurst.
Charleston, John Baptiste.	Ottawa.	Didier, L. P	Aylmer, Que.
Comer, Billa F		Devine, Patrick J	Sheenboro, Que.
Carter, George	Sundridge.	Dinsmore, Richard	Huntsville.
Corrigan, Robt. J		Dunn, Percy E	Longford Mills.
Caswell, Grant		Duval, Chas	
Caswell, Geo	Coldwater.	Donlevy, James	Calabogie.
Chemir, David A	Pembroke.	Doris, Patrick	Peterborough.
Clairmont. Philadelp L	Behoeveen	Doris, John	
Crowe, Edgerton	Cholmaford	Donahue, Michael	
Clark Donald Allen		Doran, W Dickson, Robert R	Belleville.
Clark, Donald Allan Charette, Herbert	I	Donlevy, Wm. C	Rippewa, Que.
Christie, Uriah W		Duff, Chas. A	Rockcille.
Clark, Joseph C	Fort Frances.	Dean, James C	Konora
Crowe, Leslie	Bobcavgeon.	Duff, Peter A	Claybank
Campbell, Duncan W	Stewartville.	Duncan, Downey	Rainy River
Callahan, Thomas N	Arnprior.	Dougherty, J. M	Fort Frances.
Clements, Albert James	Bent River.	Dunn, John F	Spanish Mills.
Carney, Albert	Sault Ste. Marie.	Dyke, Morris F	
Collins, Arthur	Massey Station.	Devitt, Frank	Dinorwic.
Carter, George	Lavelle, Que.	Dickie, David	Port Arthur.
Chitty. Alfred E	Kenora.	Dupuis, Alfred	Keewatin.
Cardiff, Richard J	Arnprior.	Devlin, Samuel	Spanish Mills.
Conway, Thomas	Barry's Bay.	Dougherty, W. H	McLaren's Bay
Costello, Thomas M	Antrim.	Duffy, William A	Callender.
Cross, R. J.	Silver Islet.	T. 1	
Clark, R. H	Port Arthur.	Enlaw, Oliver	Campbellford.
Coombs, A. B.	Bracehridge	Ebert, Andrew P	Pembroke.
Cameron, A. F.	Emo.	Ellis, Alexander Ellis, John	Weatmoath
Campbell, J. S.	Fort Frances	Errington, Joseph	
		Eddington, Henry John	Parry Sound
Didier, Hector	Mattawa.	Enright, Daniel	Port Arthur
Doran, Frank	Barryvale.	Eager, James	Parry Sound.
Dunning, E. Percival	Parry Sound.	Elliott, Porter P	Mine Centre.
Duff, R. J	Arnprior.	Elliott, William	
	, <u>-</u>		,

Name.	P. O. Address.	Name.	P. O. Address.
Edgar, J. E	Kenora.	Fortune, Percy H	Blind River.
Elliott. George E	Peterborough.	Fraser, Wm. Foster	
Edwards, Joseph K	Gillies' Depot.	Fraser, Allan H	
Eldridge, Robert	Fort Frances.	Farquharson, James	Tomiko.
	**	Fink, John	Mattawa.
Fraser, John A		Fletcher, Nicol B	Parry Sound.
Ferguson, Wm. H		Chieff Con E	Pembroke.
Forbes, Chris. McKay Fitzgerald, E. Clair	McLean's Depot. Parry Sound.	Griffith, Geo. F	Arnprior.
Farrell, W. H		Graham, John	Gilmour.
French, Lewis William	Byng Inlet.	Gunter, Henry M	Trenton.
Fraser, William A		Goltz, Ernest	Bardsville.
Finerty, Patrick		Green, Forman A	Gilmour.
Farnand, Frank	Diamond.	Green, Samuel E	Parry Sound.
Fulton, Philip S	Spanish Station.	Grant, John	Flinton.
Fitzgerald, Ullyot C		Green, Arthur	Ottawa.
Fenn, George	Bracebridge.	Green, Norman McL	Bancroft.
Fortune, Owen	Trenton. Norman.	Gillis, John J	Whitefish.
France John	Collin's Inlet.	George, R. W	Parry Sound.
France, John Ferguson, Ernest A	Baysville.	Gardiner, John	Parry Sound. Trenton.
Ferguson, Alpen	Mattawa.	Golden, Frank J	Thessalon.
Ford, John William B	P'r'tge du F'rt, Q.	Garson, Robert	Penetanguishene
Ford, Charles	Wahnapitae.	Gropp, August	Muskoka Mills.
Findlay, J. H	Braeside.	Goulais, James	Peterborough.
Fraser, James	Renfrew.	Grayson, Charles	Keewatin.
Fairen, Francis	Peterborough.	Gladstone, Harry E	Cook's Mills.
Faulkner, Jos	Fesserton.	Guertin, Oliver	Biscotasing.
Fraser, Alexander, Jr	Westmeath.	Gelinas, Frank	Hull, Que.
Fairbairn, William	Calabogie.	Gwynne, John	Hawkesbury.
Fraser, Wm. A	Pembroke.	Gray, Frederick M	Brule Lake.
Fraser, Foster	Pembroke. Little Current.	Graham, Edward G	Wahnapitae.
Fraser, Wm Fraser, Hugh Alexander	Pembroke.	Griffin, James	Spanish River.
Flaherty, John	Lindsay.	Gordon, Alexander B	Pembroke. Pembroke.
Fisher, Wm	Trenton.	Gareau, Noah J	Carleton Place.
Fox, Thomas	Deseronto.	Gilligan, Edward	Mattawa.
Fallis, James W	Sturgeon Bay.	Gladman, Charles	Parry Sound.
Fairbairn, N. H.	Webbwood.	Garrow, John D	Ottawa.
Friel, John	Trenton.	German, William Burton	Wahnapitae.
Fox, Charles	Trenton.	Gordon, Robert W	Pembroke.
Featherstonehaugh, W. H.	Penetanguishene.	Guertin, Nelson	Petawawa.
Friar, SchuylerFarren, Joel	Westmeath. Savanne.	Gardner, John	
Fraser, Duncan	Big Forks.	Gunter, Peter M	
Freestone, Walter	Burk's Falls.	Glennie, William	
Fraser, John	Bancroft.	German, Maurice J Gillies, John A	
Fitzgerald, D. C.	Spanish Station	Goddin, Edward	
Foster, Wm. C.	Searchmont.	Grant, Joseph	
Frazer, Jas. C.	Spanish Mills	Gilmour James B	Bracuide
Fremlin, H. P.	Richards' Land'o	Gorman Joseph P	Sault Ste. Marie.
Toster, Ed. G.	Sault Ste Maria	Gordon, Thomas A	Hall's Bridge.
rarrel, Peter M.	Whitefish.	Gray, Albert H	
Fairhall, Edward	wniteside.	Gadway, John	Parry Sound.
Fraser, Levi	Dracebridge.	Garrow, Edward	Webbwood.
Fiddes, James. Frawley, Frank	Orillia	Golding, William	Dorset.
Fisher, George	Sault Sto Mordo	Gillies, Harry	
Finatrault, J. A.	Blind River	Gordon, Herbert C Gillespie, M. H	
Farrier, John William	Chaplean	Griffin, William	
771	East Bass	Ganton, David	Taurisville.
Finney, Benjamin B	FOIL Frances	KTAHLOH, DAVIO	Trout Creek

Name.	P. O. Address.	Name.	P. O. Address.
Fraham, Frederick S	Arnprior.	Hall, Charles Asa	Penetanguishen
Fill, Cuthbert	Orillia.	Hearl, John	Callender.
Graham, James Robert	Kenora.	Howe, Isaac	Fort Frances.
Graham, Thomas Jordan	Byng Inlet.	Halliday, James	Springtown.
Saudaur, Antoine Daniel	Orill i a.	Hurdman, J. A	
Jorman Patrick	Eganville.	Hawkins, Stonewall J	Meldrum Bay.
duy. Charles	Fort Frances.	Hinchcliffe, William	Gunter.
raham, George H	Gillies Depot.	Henderson, Arthur	Baysville.
reer, George P	Port Arthur.	Hillis, James M	Sutton West.
fill. Charles	Fort Frances.	Harris Wm. Jr.	Day Mills.
Samey, William H	Englehart.	Hogg W I	North Bay.
Forman, Michael J	Diver.	Hoxie, E. P	Katrine.
rier. Roy B	Kenora.	Hawkins, Walter	Pembroke.
reer, Samuel H	Gore Bay.	Howard, James	Eganville.
Filbert, Sidney N	Rain; River.	Howard, William	Baysville.
Juilbeault, A. T	Klock's Mills.	Hogan, Enos W	Savanne.
		Horne, John T	Fort William.
Hale, Thomas	Pembroke	Hamilton, Chas. E	Kenora.
Hogan, Albert J.	Sault Ste Marie	Henderson, Leonard	Baysville.
Hagen, Edmund G	Little Ranide	Hunter, Thos	
Hagen, Wilson	Thomaslon	Hamilton, Robert J	Ottawa.
furd, Cyrus	Parry Sound	Hawkins, William A	Pembroke.
Henderson, Albert E		Herring, Edward C	Sebright.
Hale, John B		Hatch, J. W	Dryden.
Hickerson, Melvin T	Fort Frances	Hoard, Wm. Paris	Emo.
Howey, George H	Fort Frances.	Hartman, W. R	Blind River.
Hartt, James	Gilmour	Hill, Ernest L	Hawkesbury.
Hayes, James	Enterprise	Hall, Samuel S	
Humphrey, T. W	Gravenhurgt	Hasleton, Constantine	Killaloe.
Huckson, A. H		Hamilton, A. J	Spragge.
Iandley, Robert	Dongles	Heggart, E. C	Trout Mills.
Iowe, Alexander	Ouglas.	Hunt, Ronald E	
Iurd, Edwin	Hurdville	Hurd, Asahel	Parry Sound.
Luff, J. S. Morris	Arnnrior	Howe, Peter	
Halliday, Robert J		Hammond, Samuel H	Fort Frances.
Iutton, John		Hunt, Alex. D	
Hutchinson, Wm. E		Home, John F	
Hogarth, Joseph Rowan		Hay, Benjamin	
Jumphrey, John	Gravanhuret	Hogan, John	
Hill, Joshua	Midland	Hargis, Thos	Port Arthur.
Iall, David	Lovering		
Iartley, Charles	Peterhorough	Irving, Thos. H	
Hawkins, Henry Chas	Riind River	Irwin, Eli	
lines, Philip Wallace	Hunteville	Irving, Edward C	Kenora.
Iudson, John Lewis	Combormore		
Iurdman, William H	Ottowo	Johnston, Ralph E	
lughes, John	North Day	Johns, Frank A	Toronto.
Iowie, R. G.	Now Lielroand	Jackson, Robert	Brechin.
lelferty, Dennis		Johnson, Finlay	Bracebridge.
	Kenora.	Jones, Albert	
Toppins, Abiram		Johnson, Thomas	Bobcaygeon.
Hoppins, Densmore		Johnston, Archibald M	Norman.
Haystead, John	Parry Sound	Julien, Charles	Trenton.
Henderson, John Irwin	Rohoayason	Junkin, Henry	
Jordon William		Johns, Frank	
	Millbridge.	Jessup, Edward D	
Higgins, John C	reterporough.	Johnson, Frank N	
Harrison, John, Jr	I o Protor Ellete	Johnston, John	Peninsular Lake
Tawkins, E		Johnson, S. M	Arnprior.
Ienderson, Charles	pracepridge.	Jones, Frederick James	Flinton.
Ialliday, Frank	D C- 3	Johnston, William A	en

Name.	P. O. Address.	Name.	P. O. Address
Iones, William	Fenelon Falls.	Lochnan, James	Ottawa.
ames, Martin	The Flats.	Link, Henry W	Ottawa.
Johnston, James		Ladarotte, John	Arnprior.
Johns, Alexander		Lochnan, John	Aylmer, Que.
ackson, John A		Lozo, John	Trenton.
ohnson, Thomas			Pembroke.
ohnston, George N		Loughrin, Lawrence	
-		Linton, J. H	
intree Stuart	Little Rapids.	Ludgate, James	Peterborough.
Cerby, John	Belleville.	Lee, Robert	Huntsville.
Cennedy, Robert		Langford, Mark	Baysville.
Cirby, Louis Russell		Letherby, Edwin	Midland.
Cennedy, Timothy		Leahy, Francis M	Chapeau, Que.
Cirk, Henry	Trenton	Langford, Henry	Baysville.
		Lessard, Philip	Kenora.
nox, Milton		Lovering, William James.	
insella, Michael Pierce	Eronch Direc	Lane, Maurice	Bobcaygeon.
itchen, D	G. 3h.		Peterborough.
elly, Jeremiah		Lenton, George	Renfrew.
Celly, Ferdinand		Lowe, Thomas A	TT 4 444
Kennedy, T. J		Livingston, Robert M	
Kenning, Henry		Londry, William E	Sault Ste. Mari
Cirby, D. F	Belleville.	Labelle, James	Waltham, Que.
Kirkpatrick, David	Lindsay.	Labelle, Eli	Waltham, Que.
Kean, John F	Orillia.	Ladurante, J. D	Ottawa.
Kellett, Fred		Ludgate, Theodore	Peterborough.
Kelly, Michael J		Lucas, Frank	
irk, William James		Lunam, Duncan	
Kerr, E. G		Lott, George	
King, Napoleon		Lawrie, John D	Parry Sound
Kean, B. F		Lovering, George Francis.	Coldwater
		Lucas, R. G	Christina
Kemp, Orval Wesley		LeBlanc, Edmund C	Chaplean
Kirk, Charles Barron		Lavigne, John	Animan One
Kingsland, W. P		Landell, Charles S	Aymer, Que.
Kerr, John B		Lance Hopey Eligha	Fluntsville.
Cennedy, Walter		Long, Henry Elisha	Mattawa.
Kennedy, John		Lynch, W. H	Collingwood.
Knox, Wm. M	Fesserton.	Laplante, Francis	Byng Inlet.
Kingston, Robert	Wisawasa.	Lindsay, James	Arnprior.
Cearnan, Edward	Blind River.	Labelle, Michael	Arnprior.
Cearney, Michael John	Buckingham, Qu.	Legree, John	Dacre.
Cendrick, John	Burk's Falls	Legree, James L	Calabogie.
Cendrick, John L		Leigh, John Chas	Gravenhurst.
Kennedy, John W		Lloyd, Edward B	King.
Celly, James F		Lemyre, Bruno	Gravenhurst.
Kauffman, Julias		Lavelle, Charles H	Canne Lake
Cennedy, Sylvester		Lyons, James	Waltham Sta
Kernahan, George A		Ledwood, Charles	Ottowa
Kehoe, Martin		Levelle, Emrey	Waltham Sta
Kennedy, Daniel J	Constitution	Little, Theo	Vancuam Sta.,
		Lehman, Joseph	Strotton Statio
Cay, Arthur	norman.	Lafare, Mark	Casho Po-
eannoth, Francis	Arnprior	Leach George	Cache Bay.
Lee, James	Warren	Leach, George	vermilion Bay
loyd, Alfred	Savarn Bridge	Lott, Angus M	spanish Milis.
awrie, Frank A	Darry Cound	La Belle, Ambrose	Kenora.
atimer, Jas	Frank's Pa-	La Breen, Douglas	Kenora.
Ampro Middo-	Сатанка Вау.	Lavelle, Michael J	Blind River.
emyre, Middey	Campbelliord.	ILVIETOD. J. E	Down Com d
utz, Jacob	rarry Sound.	Laior, William J	Anndin
Luby, John E	Ottawa.	Lalonde, Joseph Maxine	Link
Law, Wm. J	Markstay.	Laderoute, Michael	Arnorior.
Lummis, Daniel	Glanmire.	Leroy, Levi H	Port Arthur.
Lowe, W. C	Port Arthur.	Lusigneau, Arthur	Pembroke
Londry, S. C			

Name.	P. O. Address.	Name.	P. O. Address.
Malloy, Mark	Baysville.	Milne, Fred	Trout Mills.
Martin, Hugh	Sault Ste. Marie.	Milne, William H., Jr	North Bay.
Miller, R. O	Gravenhurst.	Murphy, Dennis	Thessalon.
Morrison, James	Toronto.	Mackie, Thomas	North Lake.
	Huntsville.	Miller, P. H	Blind River.
	Burk's Falls.	Munro, Philip	Braeside.
	Trenton.	Mangan, Patrick	Arnprior.
	Stoco.	Marcil, Peter	Ottawa.
Malone, Wm. Patrick	Ottawa.	Main, Samuel	Spanish Station.
	Trenton.	Morley, Charles	Huntsville.
Miller, John W	Huntsville.	Moore, David Henry	Peterborough.
Muchinbacker, Asa	Rosseau Falls.	Murphy, John	Arnprior.
Morris, Geo. F	French Bay.	Mathieson Daniel	Chelmsford.
Aurray, George, Jr	Waubaushene.	Milne, Wm	Ethel.
Maughan, Joseph	Fort William.	Mangan, Charles	Burk's Falls.
Margach, Wm. J	Port Arthur.	Mooney, Lincoln	Orillia.
Aurray, George, Sr	Waubaushene.	Mangan, John	Arnprior.
Ianice, Wm	Peterborough.	Mooney, Thomas	Kingston.
furray, Wm	Kenora.	Mason, Robt. T	Rochesterville.
Morgan, Richard J	Kenora.	Moore, Wm. John	Gravenhurst.
fagee, Thomas Arthur		Morrison, Donald	Reay.
Murdoch, James	Cook's Mills.	Moore, Wm	Bobcaygeon.
Iulvahill, Wm.	Arnprior.	Mutchenbacker, Herman	Rosseau Falls.
Murphy, Arthur		Moore, Norman	Arnprior.
Mayhew, Jacob		Morley, John R	Kenora.
Molyneaux, George	Donny Cound	Mackay, J. A	Big Forks.
filway, Joseph	Farry Sound.	Miller, Robt	Montreal.
fackie, Nathan	Port Author	Mackey, Levi Raiph	Keewatin.
filne, Archie	Arnuston	Morley, Frank W	Kenora.
furray, James	Dotorhorough	Madden, F. M	Haileybury.
Moore, James A. E	Lakofiold	Miller, Walter E	Owen Sound.
Merkley, William A	Ottowo	Murray, Robt	Berriedale.
Murphy, Hugh R	Ottawa.	Mills, W. J	Cache Bay.
furphy, W. J.	Arnnrior	Martin, Oscar	Buckingham, Qu
Murray, William	Markatov	Margach, Jas. A	Kenora.
Martin, Edgerton	Marketay.	Murray, Peter	Emo.
fathieson, Archie	Fort Frances		m
foore, Henry R	Lakofiold	McCaw, Joseph E	Tweed.
lickle, Chas S	Cravanhurat	McLaren, Peter	Kenora.
fullen, James	Wahhwaad	McGregor, Colin F	Kenora.
forley, A. W	Winning	McKenzie, Robert	Kenora.
lacdonald, James M	Vorth Bor	McFadyen, A. J	Bracebridge.
loney, Harry	Hollowhumm	McCaulay, Thos. J	Goulais Bay.
lather. Allen	Zaawatin		Spanish Mills.
lenzies, Alexander	Soult Sto Monto	McKenzie, Alex E	Ansonia.
iunro, Peter P	Commondo		Arnprior.
ason, Benjamin	Wortmooth		Orillia.
ionagnan, John R.	A mmnmlom		North Bay.
lonagnan, M. J	A wm n m t c m	McCrindle, Jas	Whitester.
ulvinili, John	Arnneion	McGhie, Chas. S	Whith.
ioran. Andrew	Doolsingham On	McGenigal, John H	
ruivillii, Michael	Arnnrior I	McCart, Patrick	
lann, John	Manitowaning	McGrath, Thos. B	Trenter
larrigan, Richard	Deseronto	McCorrick, James J	Fencion Falls
lonaghan, John Dorland.	Deseronto	McCarthy, Wm	Campbollford
latheson, Wm	Chelmsford	McConnell, Lewis	Forgerter
funro, Alex. G		McMullen, George	Spragge
furphy, Oliver A	Markevilla	McNab, Angus	Durnstown
Iellor, Charles	Port Arthur		
fillions, Harry		McColgan, C. H	Arnorios
facDonell, R. D		ATACCOMITTION TO THE CONTROL OF THE	

Name.	P. O. Address.	Name.	P. O. Address.
M. G. abasta Dabata E	Washington		IIttn-
McCagherty, Robert E	Coloborio	McConnachie, Roy Stewart	
McNab, Archie	Calabogie.	McDonnell, J. K McDonald, Alex. J	Vermilien Dem
		McKay, D. A	Rainy Diver
McIvor, J. A	Konoro	McMillan, James	
McDonagh, Rod		McPhee, Ronald	
McManus, James		McKay, George Donner	
McKinley, J. H		McWilliams, Maxwell	Peterborough.
McPherson, Jas. S		Theodore	recerborough.
McKinley, Edward C		McLeod, John	Keewatin.
McClelland, John		McPherson, George	
McFarlane, J. W		McDougall, John D	Kenora.
McDonald, Roderick		McGregor, Duncan	Burnstown.
McCormack, Wm		McLean, Peter W	Sand Foint.
McCreary, William		McNichol, John	Sudbury.
McCuaig, James C		McInnis, D. E	Cache Bay.
McColman, Peter		McLaughlin, Samuel	Waubaushene.
McLeod, James D	Gravenhurst.	McCollam, John	North Bay.
McCrimmon, N. K		McManus, John C	Arnprior.
McCreary, James, Jr		McLean, John	Blind River.
McPhee, Hugh	Byng Inlet.	McLeod, Norman	Garden River.
McCudden, James	Arnprior.	McLean, James	Blind River.
McLachlin, J. A	Arnprior.	McNally, J. A	Desbarats.
Macpherson, John	Ottawa.	McNab. Alexander	Arnprior.
McEachren, John A	Gravenhurst W.	McFarlane, Alexander	Renfrew.
McLeod, Dugald	Gravenhurst.	McFarlane, J. D	Stewartsville.
McClelland, R. H	Parry Sound.	McFarlane, Duncan	Renfrew.
McEvoy, Frank	Campbellford.	McKendry, Wm. B	Arnprior.
McDermott, Peter	Orillia.	McPhee, Hugh	Renfrew.
McIlroy, John	Madoc.	McPhee. John	Arnprior.
McNab, Robert J	Parry Sound.	McLachlin, Peter	Arnprior.
McFadden, James	Ottawa.	McLachlin, Alexander	Arnprior.
McIntosh, James G		Mackey, Edward	Arnprior.
McInnis, Hector D	Bracebridge.	McEwan, Henry	Trenton.
McKinnon, Malcolm	Bracebridge.	McDonald, Alfred	Peterborough.
McLean, Daniel		McGeary, John J	Sundridge.
McKinnon, Archie J		McDonald, Archibald W	Gilmour.
McKay, D. C		McGaw, John Gillen	Queensborough.
McDonald, James		McCauley, Barney	Trenton.
McPherson, Allan		McDougall, James T	Klock's Mills.
McDonald, James P		McInenly, Thomas	Quebec, Que.
McFarlane, Jos. C		McBride, Archibald	Arnprior.
McNabb, Alexander		McFarlane, Robert L	Arnprior.
McGrane Edward		McGowan, Wm	Parry Sound.
McGrane, Edward	Lindsay.	McLachlin, Norman	Arnprior.
McLeod, Donald, Jr McDonald, Hector R	Keewatin.	McDonald, Laughlin	Pendleton.
McDougall, Duncan	I nessaion.	McIvor, William J	
McNabb, Alexander D	Bracepridge.	McKee, John P	Sturgeon Falls.
		McGowan, Thomas	Couth Divas
McNamara, John C	Dung Intot	McDermot, Patrick	South Diver
McGillivray, Duncan D	Algeme Millet.	McKay, Angus	Longford
McIntyre, Daniel A	Klook'a Wills.	McDonald, A. J	Cravenhuret
McNamara, Lewis	Klock's Mills.	McInnis, Angus D McKendry, Alexander	Wanhanghara
McDonald, Sydney C	Mottowa	Magazina Discather	North Por
McGurn, John J	Buokingham O-	McGuire, Timothy McGrath, John	Peterhorough
McKeown, Jno. Joseph	Dort Arthur	McGrath, John	Potorhorough
McNeel, David	Soult Sto Maria	McCoghorty Dotatol	Wagtmanth
McEwan, Andrew	Thougalor	McCagherty, Patrick McKendry, Daniel	Arnorios
McCool, Christopher L	Cartion	MacDonald, D. F	Parry Sound
MANUALUI, CHIIBUUUHEI II	Cartier.	macDonaiu, D. F	Tally Sound.
McCollom, Donald	Arnnrior	McManus, Thomas J	Renfrew

Name.	P. O. Address.	Name.	P. O. Address.
	0		17
McColgan, Edward	Quyon, Que.	Nevison, Herbert	Kenora.
McKay, John		Nicholson, John	Owen Sound.
McKinnon, William		Newall, John H	Parry Harbour.
McKittrick, Frank R. F		Nolan, John	Gravenhurst.
McMichael, Charles	North Seguin.	Newton, Charles W	Victoria Harbour
McIlroy, Thomas Davis	Madoc.	Nent, Charles	Vermilion Bay.
McDonald, Wm. Henry	Trenton.	Needham, John G	Pakenham.
McGaw, Wm. Thomas	Callender.	Netterfield, David	John's Island
IcMillan, L	Callender.	Nault, James	Fort Frances.
AcDermott, John L	Orillia.		
McDonald, Chas. M	Pembroke.	Oullette, Joseph P	Cutler.
McPhee, Benjamin	Pembroke.	O'Neil, Tnomas	Bancroft.
McGee, John Edward	Parry Sound.	O'Neill, Daniel H. H	Arnprior.
Macfarlane, Mack		O'Leary, Patrick J	Orillia.
MacCallum, Alexander		Oliver, Charles R	
McRae, Farquhar	Kenora.	Overend, George J	
MacCallum, Albert		O'Brien, Andrew	
McGonigal, John		O'Brien, Frank G	
McConachie, John		Oliver, J. A	
McKay, D. G	Kenora.	Owen, W. J	
IcDonald, James		O'Connor, John	
McCulloch, John L		Oliver, Darcy	
AcConnell, James		O'Connor, Wm	
McIntyre, William John.		O'Neil, James W	
CDonald, Allen		O'Donnell, Wm	Penetanguishene
McLay, Albert	Devlin	Owens, Richard	Ragin Denot
McQuarrie, Daniel		O'Reilly, Patrick	
McNaughton, Daniel		O'Neill, Mark	
AcCagherty, William E		Orrill, John	
dcDonald, John D		O'Neill, Patrick	
AcCagherty, Joseph T		Orde, Francis W	Konore
McAdam, Arch H		O'Driscoll, Joseph	Coult Cto Morio
McMurphy, Dugald, Jr		O'Gorman, Peter	Dlind Divor
McCall, Alfred		Ogden, L. M.	Fort Frances
AcRitchie, William		oguca, E. M.	rott Frances.
McRitchie, Malcolm		Pigott, John	Fitzrov Harbour
McDonald, John Harold	Pudel Deple	Paul, Charles A	
McAuley, William Davis	Coult Cto Monio	Patinson, Thos	Bracchridge
McCallum, Thomas	East William	Price, A. E.	
McWhinney, Fred	Fort William.	Presley, J. F	
McNairney, Hugh H		Power, James	
		Patzel, Adolph	Ampraise
McKelvie, William McGovern, Frank	Otter Lake Sta.	Plaunt, William B	Eraprior.
MaCallum Cardon	Sault Ste. Marie.	Plaunt, Joseph	Eganville.
McCallum, Gordon	Fort Frances.		
McCallum, Henry	Fort Frances.	Porter, Charles C	
McLaughlin, Russell	Spanish Mills.	Preston, R. E	Kenora.
IcAdam, Miner S		Petrie, Geo. A	Fergus.
McDougall, David A	Nesterville.	Pomeroy, Peter	Trenton.
McLeod, William A	Manitowaning.	Perry, Pringle K	Byng Inlet, N'th
McKee, D. A	Wylle.	Purcall, W. G	Ottawa.
McKay, Norman	Fort Frances.	Purvis, John	Parry Sound.
McIntosh, Wm	Biscotasing.	Porter, James	Uphill.
McMahon, Edwin	Nesto P.O.	Pearson, John James	Lindsay.
McGowan, Thos	Parry Sound.	Penney, Chas G	Cache Bay.
McDonald, Norman	Keewatin.	Pennock, James P	Hardwood Lake.
McLeod, John C	Port Arthur.	Purdy, John A	Uxbridge
		Playfair, R. J	Blind River
Nescott, George	Kenora.	Paterson John	Wahnanitae
Newton, Frank	Gravenhurst.	Paterson, Alexander	Orillia
Newburn, Wm	Parry Sound.	Parke, James	Gravenhurst.
Niblett, James	Arnprior.	Parquette, Oliver	Webbwood.
Niblett, Robert	^ .	Palmateer, Sherman	

Name.	P. O. Addres	Name.	P. O. Address.
Paget, George	Huntsville	Ramsay, Charles	Sudbury.
Pounder, Joseph			Pembroke.
Pell, Richard D		Richards, Henry	Dacre.
Perry, Frederick			Killaloe.
Paget, Charles Edward			Spanish Mills.
Porter, Thos. Robt. Mark.	Dorget	Ridley, Robert	
Pountney, E. J	Arnorior	Riley, Charles W	
Pyburn, David J	Dorget	Raymond, Morris T	
Purdy, Geo	Hintonhurg	Rooney, Wm. H	Campbellford.
Playfair, Andrew Wm	Soult Sto Morio	Revell, J. O	Dryden.
Pipe, Taylor	Hailarbury	Rankin, Anthony	Cache Bay.
Pipher, George E	Mowat	Ross, Angus	
Pendee, David	Parry Sound	Robinson, Albert E	Washago.
Piper, A. J	Blind River	Robinson, Edward	Washago.
Paget, Alfred H	Abmic Harbour	Robinson, Thomas G	
Powers, John J	Trout Mills	Raycroft, William T	Sarnia.
Pigott, William D	Fitzrov Harbour.	Roberts, Ivor M	Garden River.
Potts, Cyril	North Lake	Revell, Lionel Oliver	W. Gravenhurst.
Pilkey, William	La Vallee.	Regan, Judd Patrick	Orillia.
Pointer, Roy R	Pembroke.	Robins, Etna Rosedale	
Piper, Roy	Blind River.	Regan, John, Jr	Orillia.
	1	Ryan, James	Savanne.
Quinn, William	Peterborough.	Rusk, Oscar W	la
Quigley, Hugh	Penetang.	Robinson, Thos. Geo	
Quirk, Thomas J	Petawawa.	Rooksby, Wm	Campbellford.
Quance, Louis F	Berriedale.	Ramesbottom, Robt	Byng Inlet.
		Roy, Lewis	
Robertson, D	Kenora.	Riddell, Horace A	
Richardson, Fred'k George	Trenton.	Rowan, A. L	Sault Ste. Marle.
Richards, Richard	Tamworth.	Ritchie, James A	Spragge.
Riddell, Geo. Alexander		Ross, George Joseph	
Robertson, Lewis McLean.	Dunchurch.	Rowe. Frank E	
Robinson, Wm. F		Regmibal, J. Hector	
Reamsbottom, Wm		Reid, William T	
Richey, Evan		Ross, Sidney	
Randall, Lewis G			
Richardson, Chas. Marvyr		Smith, M. D	Fort William.
Rochester, Daniel Baillie.		Scanlan, William	Enterprise.
Riddell, James		Sutherland, D. H	Gravenhurst.
Rice, Asa S		Spanner, John	Huntsville.
Roberts, T. A		Shier, James D	Bracebridge.
Ross, Andrew		Spooner, W. R	Katrine.
Rose, Donald M		Simpson, Alfred E	wakeneid.
Rawson, Charles Edward		Souliere, John B	~ • • • • • •
Ross, George		Shields, James A	
Roberts, Percy T		Spargo, George	Ottawa.
Ritchie, Wm. D Ramsay, Robert	Ampaica	Smyth, W. H	Baysville.
Ritchie, J. F	Arnprior.	Salmon, R. H	Byng Inlet North
Ritter Samuel G	Alimia Harbaur	Salmon, Alexander C	Baysvine.
Ritter, Samuel G Rothera, Charles F	Sturgeon Fella	Stremer, A	Donny Cound
Ryan, Alfred	Ryng Inlot	Shields, Frank A	Oridokie
Rogers, Fred		Stapleton, John J	Fort Frances
Reid, George William		Sloan, William H	Cache Pay
Robertson, John A	Kenora	Smyth, Job ESage, Nelson	Muckoke Mille
Robinson, Wm	. Bohcaygeon	Seymour, Edward	Whitefigh
Reid, Joseph B	Lindsay	Shaw, Thomas B	Wanhanghana
Ross, Walter M		Swanston, James	Peterhorough
Ruttle, H. A		Simpson, William	Hall's Bridge
Richards, Benedict	Ottawa	Sadler, Thomas	Lindsay
Regan, John		Smith, Patrick Albert	Norman
Russel, Wm	. Pembroke	Snaith, William J	Mattawa.
	- i - Ombione.	,, , , , , , , , , , , , , , , , ,	,

Name.	P. O. Address.	Name.	P. O. Address.
Sinn, William F	Arnnrior.	Swallow, C. H	Day Mills.
Sheppard, Wm. Joseph	Wanhanghene		Mine Centre.
Sheppard, wm. Joseph	Porry's Ray	Stewart, John	
Spears, Milton B	Detemberough		
Stevenson, Arthur	Coult Sto Morio	Sullivan, George L	Konore
Stein, Paul	Thereselen	Short, James	
Shaw, Alfred	Thessalon.	Shaw, Fred. Jason	
Sequin, Napoleon	Spanish Station.	Short, Chas. J	Kenora.
Scrim, Robert		Smith, David H.	
Sharp, James A	Sudbury.	St. Hillaire, George	Arnprior.
Shaneay, Harry S	Cook's Mills.	Souliere, Joseph C	Cutter.
Smith, Wm	Ottawa.	Scott, J. C	Fort Frances.
Stewart, Daniel	Braeside.	Stewart, Frank E	Crozier.
Sheehan, Michael H	Waubaushene.	Sanders, Edward	Barwick.
Smith, Sydney H	Bracebridge.	Spence, William	Arnprior.
Stewart, James A	Pembroke.	Scott, Allan A	Norman.
Sproule, Newton H	Schomberg.	Souliere, Max	
Simmons, Alex	Port Arthur.	Stewart, David	
Scott, Thomas		Shaw, Donald	
Smith, Lawrence		Smyth, C. W.	
Shea, Stewart	Campbellford.	Stewart, Jas. Max	TYPE
Sullivan, John	Sault. Ste. Marie.	Stewart, Russell C	Winnipeg, Man.
Sinclair, Finlay	Sudhury	Sisson, Heber P	Hymers.
Shiels, Henry F	Cartier	Dibbon, Heber 1	5 22015.
Smith, Gideon Ousley	Durk's Falls		
Smith, John Wallis	Thodford		
		Taylor, Fred. L	Parry Cound
Smith, Henry G	Arnprior.	Thomas Cute I	Thoragator
Story, John A	Maran	Thomas, Griff J.	Pigostosin -
Sweezy, Benjamin		Thomson, R. D.	Discotasing.
Sheppard, Charles H		Tait, Thomas B	Crown hand
Seabrook, Alex		Taylor, C. M	Gravennurst.
Spreadborough, Newlands	Little Current.	Thornton, W. D	Longiord Mills.
Sheffield, George		Trussler, Gilbert	
Sanders, William J		Thompson, Geo. S	
Sinclair, Armon D		Thompson, Fred. A. H	
Smith, Sidney E		Thompson, Francis Hy	
Sleeman, Wm		Train, A. C.	Rowan Mills.
Sheehan, Peter F		Turgeon, Geo	
Sleeman, Geo		Thayer, Wm	
Sims, Wm. K		Thompson, Alexander W.	Arnprior.
Skahill, Wm	· Blind River.	Taylor, Thos. G	Gravenhurst.
Shaw, George	· Thessalon.	Trowse, A	Arnprior.
Sarsfield, George Francis	· Sault. Ste. Marie.	Tucker, Louis A	Fort Frances.
Standish, Wm. H	 Batchawaning 	Thompson, Daniel	. P'rt'ge du F'rt. C
Simpson, Wm. A	· Lakefield. (Bay	Thompson, Richard	Kenora.
Scollard, Wm	· Young's Point.	Thompson, Joseph H	Bracebridge.
Shuttleworth, Alma	· Trout Creek.	Taylor, Edward A	
Shanacy, Wm. J		Tait, Ralph	Arnprior.
Seely, George		Train, William	Burk's Falls
Stewart, Alex. W		Turner, Garvin F	
Soreny, Wm		Tilson, Joseph	Burk's Falls
Schneder, Frederick		Tuffy, John	Cartier.
Smith. James D		Thorpe, Thomas	Pembroke
Sullivan, James		Taylor, Charles E.	Gravenhuret
Scully, Cornelius		Tench, Arthur	Hekkla
Savoy, Eutrope		Tulloch, William A	Sault Sto Mante
Smith, Walter J	Campbellford		
Seymour, John J	Whitefich	Taylor, Alex. M	D'ation 3
Seymour, John J	Dunk's Follo	Toner, J. A.	. ruge du F'rt. C
Smith, Alex. R. C.	Cholcos Out	Thrasher, Henry G	
Stewart, Richard M	Conce I - 1-	Tooke, Frank	
Souliere, John H	. Canoe Lake.	Thorburn, Donald James.	
Smith, Abraim G	. wuyon, Que.	Tetreault, Philias	. Iomiko.

Name.	P. O. Address.	Name.	P. O. Address.
Tibbets, L. R	Fort Frances.	Woods, Joseph F	Roach's Point.
Cichborne, A. C	Fort Frances.	Whaley, Thomas	
Chomson, Donald	Arnprior.	Webster, Wm. Alfred	
		Wornsdorf, Fred. Gutlep .	
Jdy, Dean	French River.	Warrell, Wm	Trout Creek.
Jrquhart, Elias	Gravenhurst.	Wims, Peter	Blessington.
Jrquhart, Andrew	Barrie.	Wickware, Philip Almont.	Cloyne.
- /		Wilson, Edward	Deseronto.
Vigrass, Percy J	Dufferin Bridge.	Whelan, P. J	McDougall.
Vincent, Joseph	Warren.	Whyte, John Thos. Goth	Ottawa.
Vollin, Samuel	Nosbonsing.	Watterworth, J. A	Sault Ste. Marie
Jannier, Nelson Joseph	Bobcaygeon.	White, Wm. James	Muskoka Falls.
Vincent, James	Fesserton.	Warrell, George	Powassan.
Vincent, Henry T	Port Sidney.	Wells, George W	Little Current.
Vanderburg, Norman	Wisawasa.	Wilson, Frederick Gould	Kenora.
Valois, Armand	Mattawa.		Thessalon.
Villiers, Claude	Parry Sound.		Baysville.
Vanier, John	Sault Ste. Marie.	Wylie, Byron M	Webbwood.
		White, Allan	Pembroke.
White, Thomas S	Bracebridge.		Fort Frances.
White, A. Thomson	Pembroke.	Watts, George	Fort Frances.
Watt, R. A	Spanish.	Wood, Thomas	Parry Sound.
Wilkins, Hughes	Blind River.	White, William	Peterborough.
Wallace, T. William	Blind River.		Kenora.
White, Joseph W	Bracebridge.	White, John B	Kippewa, Que.
Watson, William	Huntsville.	Whelan, Peter M	Renfrew.
Webb, George W	Parry Sound.	Wilson, David	Kearney.
Wilcox, Thomas	Parry Sound.	Weston, Cecil	Dorset.
Wheeler, J. A. McL	Tamworth.		Dorset
Widdifield, C. H	Pine Orchard.	Woodcock, Edward	Brownhill.
Whitmore, Edgar	Rosseau Falls.	Wilson, Fred	Callender.
Wright, L. B	Sault Ste. Marie.	Wilson, Alexander R	Thessalon.
Ward, Joseph W	Ottawa.	Webster, Henry R	North Lake.
Wilkinson, W	French River.	Wallace, Fred. R	Port Arthur.
Waldie, John E	Victoria Harbour.	wanace, clayton	Blind River.
Wigg, Thomas G	Thessalon.	Wilson, Russell	Pembroke.
Wall, Patrick B	Cheboygan, Mich. Little Current.	Wheeler, George	Barwick.
Wells, John R	Huntsville.	Wall, G. L.	La Vallee.
Whiteside, John	Peterborough.	Williams, Edward R	Port Arthur.
Watt, William	Lindsay.		
Wilson, George	Parry Sound.	Younge, Harvey D	Fort Frances.
White, Thomas	Sault Ste. Marie.	Young, R. H.	Fort Frances.
Wood, William D	Fort Frances.	Yuill, John Albert	Braeside.
Watts, John J.	Fort Frances.	Young, William	
Webster, George F	Fort Frances.		Cache Bay.
Wright, Percy	Fort Frances.	Young, Samuel	Coldwater.
Watts, William B	North Bay.	Young, Patrick P	Young's Point.
Watson, William	Vonero	Young, Francis G	
Wagner, Fred	Muntavilla	Yuill, Thomas	Arnprior.
Wainwright, Edward C Wilson, Wm. James	Deceronto	Yuill, A. D.	
Wilson, wm. James	Midland	Young, C. T.	
White, James B	Manitowanina	Yuill, John Alex	
Warren, Robert M	Cacho Bar	Yuill, Archibald	
Warren, Robert M		Yuill, William	
Welch, Harold	Milharta	Young, Walter D	wnitensh.
Wilson, James A., Jr	Wohhwood	m-4-3-1440	
vinoun, James A., Jr	TO CHUWOOU.	Total, 1,448.	
Voods, John R	Antrim		

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For Year Ending 31st October

1912

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



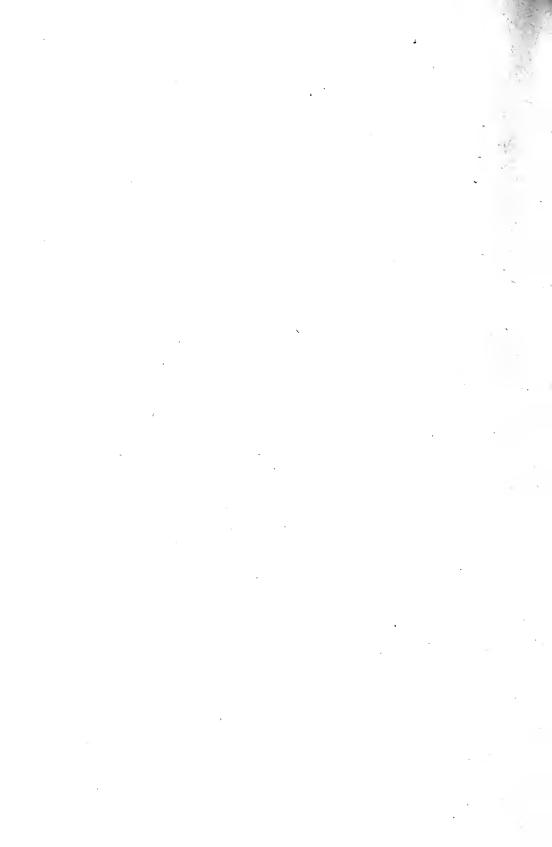
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1913

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Report of the Minister of Lands, Forests and Mines of the Province of Ontario

For the Year ending 31st October, 1912

To His Honour The Honourable Sir John Morison Gibson, K.C.M.G., Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit for the information of your Honour and the Legislative Assembly a report for the fiscal year ending 31st October, 1912, of the management, etc., of the Crown Lands of the Province.

CLERGY LANDS.

The area sold during the year was 101 acres, the value of which was \$110. The collection on account of sales of Clergy Lands was \$1,565.92. (See Appendix No. 3, page 7.)

COMMON SCHOOL LANDS.

The value of these lands sold during the year was \$94. The collection on account of these and former sales was \$7,121.25. (See Appendix No. 3, page 7.)

GRAMMAR SCHOOL LANDS.

There were no sales. The collection on account of former sales was \$292.55. (See Appendix No. 3, page 7.)

UNIVERSITY LANDS.

The area of these lands sold during the year was 11,890 acres for \$6,855.80. The collection on account of these and former sales was \$4,263.39. (See Appendix No. 3, page 7.)

Crown Lands.

There was sold during the year for agricultural and town site areas 349,319 acres for \$272,233.08. The collection on account of these and former sales was \$218,710.29. There was sold for mining purposes 18,971 acres for \$45,552.18. There was collected on account of these and former sales \$51,634.48.

There was leased for mining purposes 16,711 acres for \$17,316.65. There was collected on account of these leases and those of former years \$33,098.34. There was leased of Crown Lands an area of 15,793½ acres for \$2.157.50. There was collected on account of these and the leases of former years \$18,931.82.

The total area of Crown Lands disposed of by sale and lease during the year was 412,790½ acres for a value of \$344,319.21. The total collection on account of the sales, leases, etc., was \$335,645.04. (See Appendix No. 3, page 7.)

The townships of Kendry and Haggart, situated on the Transcontinental Railway thirty miles west of Cochrane, containing about 98,000 acres, were sold at the price of \$1 per acre cash to a company, subject to certain terms as to development and settlement. A copy of the agreement with this company will be found in appendix No. 34, page 83, and will speak for itself.

The Department, being of opinion that centres of industry affording markets for natural products and creating employment for labour, are important aids in the opening up and settlement of the new country, recommended to the Government that these two townships should be sold to a company composed of energetic and wealthy men, but subject to conditions which, while conserving the interests of the public, would become an industrial centre. The development already made is large and important, and fully justifies the expectations formed as to the good results which would be obtained by selling these townships. Over \$60,000 has been expended in the erection of buildings, opening up of roads, etc. Hotels have been erected, and a large sawmill is in operation—the latter affording a supply of merchantable lumber purchasable by settlers at reasonable prices—the absence of which convenience was one of the greatest drawbacks to the settlement of that country; for, without lumber to erect buildings, progress is very slow, and people are not able to provide homes for their families.

Not only is there now a supply of lumber, but the company is purchasing pulp wood and other kinds of timber from the settlers which enables them to stay on their lands during the winter season instead of being obliged to seek employment away from home.

In further pursuance of the policy of encouraging industries in this immense region, a pulp concession was laid out and tenders were called for. The successful tenderers were Ogilvie and Anson, now the Abitibi Pulp and Paper Company, Limited, and they are actively engaged in developing their water power, erecting mills, clearing land, etc. When this industry is in complete running order considerably over half a million dollars will have been spent, and at least 250 hands kept employed for ten months in the year. This will cause a large expenditure for wages; will create markets for the natural products, and will enable the settlers to dispose of their spruce timber removed in clearing their land, at prices which will afford them some profit for taking out their pulpwood. The lands covered by this pulp concession are not withdrawn from sale or settlement, so that there is no monopoly or tying up of land. This development is on the Abitibi River, at Iroquois Falls, and a branch of the Temiskaming & Northern Ontario Railway is being built from Iroquois Falls to the mills. The expectation is that these two large industries will be powerful incentives to settlers to take up land in that country, and the creation of other industries further west along the Transcontinental will encourage people to come in until there is a continuous settlement all along the line.

These developments, of course, are in the great clay belt, which continues to attract more attention than any other part of the Province, warranting the belief that in the immediate future we shall see a great expansion in that region. It is expected that by next fall the Algoma Central Railway will be running as far north as Hearst on the Transcontinental. Another railway from Bruce Mines is also assured, which will strike the Transcontinental midway between Cochrane and Hearst. The Canadian Northern, lying midway between the Transcontinental and the Canadian Pacific Railway, will be running within a short period. When the

Transcontinental Railway Commission takes over their road from the contractors, and trains are run on proper schedules and reasonable fares, and the carriage of freight brought down to some permanent basis, then we may expect active interest to arise and a steady inflow of settlers to take place.

During the year the following townships in the clay belt have been opened for settlement: German, Beatty, Stock, McCart, Bond, Playfair, Calvert, Leitch, Blount, Calhoun, Calder, Pyne, Fox, Fournier, and Kennedy. During the year ended the 31st of October last 250 settlers took up land in the New Liskeard Crown Land Agency, about 175 in the Englehart Agency, 365 in the Matheson Agency, and 600 in the Cochrane Agency, while many people have gone on and selected lands, but had not, on the 31st of October, been regularly entered. So that before the end of the year probably 1,500 settlers had selected and entered upon their lands in that region.

It is intended to place a Crown Land Agency at the town of Hearst and opentownships there for sale and settlement early in the coming year. It is safe to say that ultimately the region extending from the Quebec boundary on the east to the boundary of the Province of Ontario on the west, and from the C. P. R. north to the height of land, will afford homes for millions of people and support them in comfortable circumstances on their farms. In addition, large towns are certain to spring up, which will afford markets for a good proportion of what the farmers raise.

This may seem a large prophesy, but when it is remembered that the clay belt is as great in area as the present settled area of Ontario, there is no exaggeration in the statement.

FREE GRANTS.

In other newer parts of the Province considerable settlement has taken place. While the other districts have been over-shadowed in point of interest by the clay belt yet there has been good progress made. In the Rainy River Free Grant District and in the Thunder Bay Free Grant District there are considerable areas of good land, and settlement is flowing in. In the Port Arthur Free Grant Agency 500 settlers have been located during the year. In the Rainy River Free Grant Agency 366 have been located. In the Dryden Agency 158 settlers were located. Altogether nearly 1,700 free grant locations were taken up by intending settlers, who located and purchased in addition about 262,000 acres. During the year, 1,095 locatees completed their settlement conditions and obtained their patents.

The following townships were opened under the Free Grant Act during the year ending the 31st of October, 1912:

Baldwin (part), Lumsden (part), both in the District of Sudbury. Ware (part) in the District of Thunder Bay.

MILITARY GRANTS.

The total number of military certificates issued to date, authorizing veterans to select land under the Act 1 Edw. VII., cap. 6, is 13,996.

The new locations made during the year numbered 139, making in all to the end of the year 7,871, and in 14 cases location certificates were applied for and issued.

Twenty-one certificates were surrendered to the Crown for the \$50.00 commutation, making in all 3,217 surrendered.

3. F

During the year 53 certificates were surrendered to be applied in payment of lands purchased from the Crown, a total of 668.

The number of patents that were issued for lands located were 997, being a total of 5,560 patented in all.

The total number, therefore, of certificates that have now been redeemed is 11,756, leaving 2,240 still outstanding.

The locatees of all lands granted under this Act, must apply for their patents for such land before ten years have expired from date of location. If this application for patent is not made within ten years, then the land comes under the settlement regulations, and unless the settlement duties are proceeded with, the locations are liable to cancellation.

As the first locations, under this Act, were made in April, 1903, the ten years exemption, as stated above, is expiring on many of these locations.

THE MINING INDUSTRY.

Gold.—For the first time in the history of Ontario there was a substantial production of gold. In 1911 the output had a value of \$42,637.00; in 1912, of \$2,114,086.00. The greater part came from the mines of the Porcupine district, principally from the Hollinger and Dome, which came into full production early in the year. Other mines at Porcupine, whose stamp mills are under construction or actually at work are McIntyre, Vipond, Jupiter, and McEnany. The St. Antony mine at Sturgeon Lake, near the junction of the Transcontinental railway and the Lake Superior branch, and the Cordova in the county of Peterborough, yielded considerable bullion. The outlook for 1913 is for a much larger production at Porcupine. The other camps undergoing development, such as Larder Lake, Kirkland Lake, Swastika, etc., have not yet reached the stage of steady output.

Silver.—Cobalt well maintained its rate of production, the yield of silver being 30,719,883 fine ounces, worth \$17,671,918, as against 31,507,880 ounces worth \$15,953,895 in 1911. The total production since the opening of the mines in 1904 has amounted to about 156 million ounces, of a value of about 82 million dollars. A notable feature of the industry at Cobalt is the tendency towards final treatment of the ore on the spot. At first the high grade ore was shipped as mined to smelters in the United States, the low grade going to the dumps. Refining works came into being at several points in Ontario, and concentration plants became common at Cobalt, resulting in great saving of freight and the recovery of silver from ores too low in grade to admit of shipment. The third stage was the establishment of plants for the refining of the silver and the production of merchantable bars. The Buffalo and Nipissing mines are now equipped for reducing their entire output, both of high grade and low grade ore, to silver bullion.

The largest producers during the year were the Nipissing, Coniagas, La Rose, Crown Reserve, McKinley-Darragh-Savage, Kerr Lake, Buffalo, Townsite Temiskaming, O'Brien. Three mines in Gowganda and one in South Lorrain were in active operation. The principal by-product of the Cobalt mines is Cobalt oxide, of which these mines are now the chief, practically the only, source of supply. This article is used to impart to chinaware and porcelain goods the beautiful color known as cobalt blue. Another by-product is white arsenic, and a third, nickel oxide, both of which are utilized in the arts.

Nickel and Copper.-The Sudbury mines yielded 22,421 tons of nickel and

11,116 tons of copper, being the largest production yet. The nickel in the matte was valued at \$4,722,040, and the copper \$1,581,062. The producing companies are two in number—the Canadian Copper Company and the Mond Nickel Company. The former has been enlarging and improving its plant, and the latter has erected new smelting works at Coniston, east of Sudbury, to which it purposes to remove early in 1913. A third company, the Dominion Nickel Copper Company, has sold its holdings to English interests, who are likely to enter upon a vigorous campaign of production. Extensive diamond drill borings have revealed the presence of very large reserves of ore at the Frood, Murray, and other mines.

Iron Ore and Pig Iron.—Iron ore to the extent of 117,357 tons valued at \$238,884 was raised from the Helen, Moose Mountain and Bessemer mines. Concentration plants are being erected at Moose Mountain and Magpie. Of pig iron the output was 589,593 tons as compared with 526,610 tons in 1911, the number of blast furnaces in operation being eight.

Other Products.—Brick, stone, and Portland cement were produced in increased quantities, the whole production of building materials amounting in value to \$8,735,575. Petroleum continues to decline in yield, and natural gas to increase, the value of the former in 1912 being \$344,537, and of the latter \$2,268,022. Salt, gypsum, mica, graphite, corundum, tale, feldspar, iron pyrites, quartz and the other materials on the long list of minor minerals comprised in the mining industry of the Province were produced on about the usual scale, several of them providing the basis of industries of local importance.

The aggregate value of the minerals and mineral products for 1912 was \$48,-341,612, as compared with \$41,976,797 in 1911, an increase of 13 per cent. In the development and settlement of the northern portions of Ontario the mining industry is of great importance, as may be realized from the fact that it gives employment to about 20,000 men and pays out in wages over 12 million dollars yearly.

Collections.

The total revenue of the Department from all sources was \$2,900,204.74. Of this \$218,737.29 came from agricultural and town sites, and included \$98,838, the purchase price of the Townships of Haggart and Kendry. \$36,842.65 was derived from town sites; mining lands, \$51,634.48; rent—leases, \$52,030.16; miners' licenses, permits, and recording fees, \$107,162.70; royalties, \$250,145.65; supplementary revenue tax, \$190,875.53; from woods and forests the revenue was \$1,985,662.78, covering such items as bonus, \$540,702.85; timber dues, \$1,339,957.12; ground rent, \$96,262.81; transfer fees, \$8,740. (See Appendix No. 4, page 8.)

DISBURSEMENTS.

The total expenditure of the Department for ordinary services was \$603,782.31. Some of the principal items were: Agents' salaries and disbursements, \$15,374.84; homestead inspectors, \$10,524.41; Crown timber agents, \$27,630.94; wood ranging and estimation of timber, \$91,753.06; fire ranging, \$124,483.74; Forest Reserves, fire ranging, etc., Temagami Reserve \$46,394.96, Metagami Reserve, \$8,723.86; Mississaga Reserve, \$11,965.01; Nepigon Reserve, \$8,568.17; Quetico Reserve, \$4,407.95; Mines and Mining, \$32,129.01; Mining Recorders, \$27,296.75; Surveys, \$123,016.46; Refunds, \$15,625.44; Contingencies, lands, and forests, \$25,815.29; Bureau of Mines, \$9,188.67.

There was expended under the direction of the Department the sum of \$233,-534.29. Of this the largest expenditure was in connection with the Northern Development, under 2, George V., which was \$193,082.80; exploration of the District of Patricia, \$10,000; parks, \$24,471.39. (See Appendices Nos. 6 and 7, pages 10 to 33.)

WOODS AND FORESTS.

The total revenue accrual from woods and forests during the year ending the 31st of October, 1912, was \$2,068,060.38, which amount is \$83,197.78 less than the accrual for last year.

The falling off was principally in the receipts from bonus, which were \$96.968 less than the receipts for bonus last year.

The revenue collected on account of the above accrual and those of former years was \$1,985,662.78, or \$274,225.91 in excess of the revenue collected last year.

The principal increases were in timber dues \$166,673.37, and in bonus \$113,-884.14.

The mileage under license last year was 996 miles less than that of the previous year. The reason for this was that certain licensees had not paid up their ground rent or were indebted for dues, which prevented the issue of their licenses. 307 miles were also surrendered as having been cut out, and were withdrawn from license.

The output of pine sawlogs, boom timber and square timber brought into feet board measure equalled 487,838,666 feet board measure, which is 96,425,439 feet below the output of 1911.

The output of timber other than pine showed an increase of 24,093,160 feet over last year. There was also an increase in the pulpwood of 49,612 cords. The most notable expansion was in railway ties. The quantity taken out last year was 4,270,832 ties. The quantity taken out this year was 5,704,459 ties, showing an increased output for the year of 1,433,627 ties.

Several berths in the Rainy River, Thunder Bay and Kenora Districts that had been damaged by fire or cut over in previous years were sold by tender.

The only other timber sale held during the year was of two berths on the Jocko River, each having an area of 25 miles, which were in a dangerous position and on which the timber had reached its maturity, and it was considered wise to sell them so as to get the value of the timber. The sale of this timber established a record for price. The pine timber on Berth No. 1 was sold for \$13.26 per thousand feet board measure in addition to \$2 dues; and the pine timber on Berth No. 2 was sold for \$12.10 per thousand feet board measure in addition to \$2 dues. In the disposal of these berths it was determined to insert a condition in the terms of sale requiring the licensees to remove all limbs, brush, and other debris arising from the lumbering operations under the direction of an officer appointed by the Department of Lands, Forests and Mines. A deposit was required of \$1,000 per mile in each ease, which desposit is held as security for the performance of all conditions of sale. The Forester for the Province, Professor Zavitz, was requested to visit the locality, and a special ranger was placed in charge of the cutting to see that the conditions with respect to the disposal of the debris were carried out. The timber will be culled and measured by scalers appointed by the Department.

The year 1912 was, on the whole, a fairly good year for lumbermen, both as regards demand and prices. Some years ago, when our lumbermen looked chiefly

if not altogether to the United States market for their sawn lumber, and the duty was \$2 per thousand feet B.M., our inferior grades were shut out of the American market and became unsaleable, and had to be piled up at the mills. Since then we have gone a considerable distance. The expansion of our own country and the enormous building that is going on of towns, cities and railway construction, are such that our lumbermen no longer need look to the United States market, our own markets being able to use up most of the lumber taken out at a fairly good price, not only for superior grades, but for the lower grades as well.

Speaking of the state of the market during the past year an excellent authority says: "The lumber market was firm, generally speaking, throughout 1912; prices showing on the whole an increase in tendency. The demand for lumber for building purposes was probably never so large, and in the year past the United States demand was good. In Ontario the year appears to have been one of steady prices for medium qualities, but low grades also advanced, as did some of the higher grades." The advance in prices was not confined to pine, but all varieties of timber shared in the increased value. Hemlock particularly, which had been somewhat of a drug a year or so ago, became scarce and more than shared in the general increase of prices. The outlook for the coming winter is of even a smaller production of pine lumber than during the year last past.

FIRERANGING.

There were on duty during last summer: In forest reserves, 228 firerangers; on railways, 193; on lands of the Crown 111, which, with 10 chiefs, makes a total of 542 firerangers employed.

The timber licensees are required to place rangers on their limits and pay them. Under this arrangement there were on duty on licensed lands during the summer 350 rangers and 8 supervisors, making a total staff in the forest last summer of 900.

The Department divides the licensed territory into districts and places a supervising ranger in charge of each district, whose duty it is to see that all limits are properly protected by having firerangers on them. The supervising ranger visits all firerangers in his district and advises them. Should he find any limit unprotected he reports the fact to the Department, which takes the matter up with the licensee. If the licensee fails to put on rangers after notice the Department puts them on and charges the expense against the timber limit, and requires that the licensee pay it before he obtains a renewal of his license. The summer of 1912 was a very wet one, in consequence of which there were no fires of any moment.

Forest Reserves.

The Temagami Forest Reserve, which contains a large quantity of valuable pine timber, covers an area of about 6,000 miles. The Village of Gowganda, a mining centre, is in this Reserve, and there is considerable mining and prospecting going on in different localities. It has become a great summer resort, having innumerable lakes and being easily accessible by the Temiskaming and Northern Ontario Railway. Owing to the number of miners, prospectors, tourists, hunters and others moving about through this Reserve, a large staff of firerangers has to be kept on duty in the summer months. During the past summer one chief ranger and three assistant rangers were on duty in this reserve, with a staff of 137

firerangers. Owing to this close supervision and the season being a wet one, no forest fires took place.

The Mississaga Reserve contains an area of about 3,000 miles. It is called after the large river whose tributaries meander through it. There is a large quantity of first class pine in this Reserve, which, owing to its quality, accessibility, and short drive to Lake Huron, is extremely valuable. Some few years ago a considerable quantity of pine in this reserve was damaged by fire, and we sold it, obtaining as high as \$13.37 per thousand feet board measure, including dues. There have been no serious fires in this reserve since. The fireranging staff consists of one chief and 32 firerangers under him. These men are distributed in such manner as to have complete supervision of the routes of travel through the Reserve, the lumbering operations, etc. There is no mining or settlement in or near this Reserve. The only danger, therefore, would be from tourists, explorers and lumbermen, but these are carefully looked after by the ranging staff.

The Nepigon Reserve is the largest in the Province, having an area of 7,300 There is no large quantity of pine timber in this Reserve, but there is an illimitable quantity of pulpwood, consisting of spruce, jackpine, and poplar. Nepigon River is the most celebrated trout stream on the continent, and visitors from all over the United States come to enjoy the sport afforded by its waters. Great care is exercised by rangers along the portages and camping places to see that fires are extinguished by campers and others using the stream. The large lake from which the Reserve takes its name is one of the most beautiful lakes in Canada—60 or 70 miles long by about 35 miles wide. It contains a large number of islands, and is becoming better known each season. Here is one of the oldest Hudson Bay Company posts-Nepigon House-which is continually referred to in the history of the fur trade in its very earliest stages in that immense region. Two of the three transcontinental railways run through this Reserve, viz., the Grand Trunk Pacific and the Canadian Northern, while the Canadian Pacific Railway runs along its southern boundary. Great care was exercised this past season along the construction work of the Canadian Northern and the Grand Trunk Pacific. In the Reserve proper there was a chief ranger and 20 firerangers on duty under him; and in addition there were two firerangers on every two miles of railway construction on the two railways being built through the Reserve. The Canadian Northern Railway comes into the Reserve at what is now called Orient Bay, which is at the east end of the lake. It is in contemplation to make this a divisional point and erect a summer hotel there. There have been no serious fires in this reserve of late years, notwithstanding the thousands of employees on the railway which built through it. When the two railways are finished and in running order—one touching it at the north end and one at the south-it will become one of the greatest summer resorts in Canada.

The Quetico Reserve is situated in the Rainy River District abutting on the boundary waters between Canada and the United States. It contains an area of 1,500 miles and there is a very large quantity of good pine in it. There is no settlement in or near it and few prospectors. A few timber berths were sold before the Reserve was created, and some lumbering has been carried on. There are two or three Indian Reserves in this Reserve and an Indian population of 123. The Quetico Reserve is a harbour for game, and is well protected by a permanent staff. It lies immediately north of a game reserve on the United States side of the waters. There was on duty in this Reserve last summer a chief ranger and fourteen fire-

rangers under him, who looked after the protection of the timber from trespass or fire.

The Eastern Reserve is situated in the County of Addington and has an area of 100 square miles. This Reserve was originally covered by timber licenses and the townships composing it were opened for settlement. When the Reserve was set apart a surrender of the timber licenses was taken, but where settlement existed the patentees or locatees remained in occupation; consequently there are a number of settlers scattered through the Reserve. The object of setting apart this Reserve was to see how a cutover limit adequately protected would reforest. The experiment has been interesting as well as satisfactory. Growth has been luxuriant, and has evidenced that in course of time this Reserve will produce quantities of valuable merchantable pine, hardwood, hemlock, and other timbers. The Reserve is protected by one chief and six firerangers.

The Sibley Reserve contains an area of only 70 miles. It covers the great promontory at the entrance of Thunder Bay called Thunder Cape. This territory had been partly burnt over and it was set apart as a forest reserve so that it might be protected and grow up again. The result has been very satisfactory, as the point is becoming clothed again with timber. No fires have occurred in this Reserve.

There are two parks in the Province under Government control, the Algonquin and the Rondeau.

The Algonquin National Park has an area of 2,060 miles and covers the head waters of the Muskoka, Petewawa, Madawaska, Amable du Fond, South River, and some other minor streams. One of the important objects in setting aside this park was to keep the head waters of these large rivers clothed with timber instead of allowing them to be denuded. Another was to protect the game and animal and bird life generally. Another object was to afford a large forest area where people might get in touch with Nature and enjoy the benefits resulting therefrom, such as pleasant surroundings, good fishing, delightful canoeing through what may be described as a lacustrine paradise, and renewed health and strength; the quieting of the timber titles and bringing the territory back into the hands of the Crown so that the timber might be permitted to grow and be conserved for the use of posterity. The park is admired by everyone who visits it for its beauty. It is rapidly becoming a winter resort, where skating, snow-shoeing, and other Canadian recreations can be enjoyed to the full. The protection afforded the game has caused it to increase so rapidly that thousands of dollars have been obtained by taking a certain number of beaver, otter, mink, etc., and disposing of them by public sale.

Rondeau Park.—This park has an area of 8 square miles. It is beautifully situated, lying as it does between Rondeau Harbour and Lake Erie. Here is to be found the finest piece of original forest in the Province. Magnificent specimens of trees that are almost extinct are growing here, such as black walnut, butternut, sycamore, etc. This park was set apart to protect and conserve this particular forest and to create a harbour for game. It was also intended to afford a place where people from the surrounding country might have a recreation ground during the summer months. Many summer cottages have been erected. The park is a favorite resort for picknickers from towns in the vicinity. Driveways are built through it and there is a constant stream of automobiles. Ten years ago a few deer were placed in the park and they have been carefully protected. They have multiplied until they became a menace to the crops of the surrounding people and

it became necessary to kill off nearly one hundred of them, and \$800 was derived from the sale of the meat.

(For Superintendents' reports see Appendices Nos. 30 and 31, page 71 to 76.)

RAILWAYS.

An additional staff of rangers had to be put upon the railways in the Province owing to increased construction. The Transcontinental runs through the Province north of the height of land on the Hudson Bay slope from the time it enters Ontario until it passes into the Province of Manitoba. In addition to the main line there is a branch from Fort William to Sioux Lookout. Considerable progress has been made in the construction of the Transcontinental, but it is still in the hands of the contractors and we have to look after the fireranging on it very closely.

The Canadian Northern is under construction from near Ruel west to Port Arthur, and from Ruel east to Pembroke, and a large staff of firerangers were kept on it.

The Algoma Central is under construction from Hobon to Hearst. On the Transcontinental the usual staff of rangers was on duty all summer.

On these railways we have placed four supervising rangers with two men on each ten miles under them. Their instructions were to keep a close watch over the habits and acts of the labourers. The Italians and other foreigners are notoriously careless in the use of fire, using it for smudges and for cooking-not only in the camp where they live, but wherever they sit down to lunch or smoke, and they are inveterate eigarette smokers and careless how they dispose of the partly unsmoked cigarette and where they throw down matches. The rangers are instructed to impress upon the foremen the necessity for warning their men to be very careful in the use of fire, and also to be sure to extinguish it when it has served their purpose, whatever that may have been. Where the labour is English-speaking the rangers warn them and give them directions and hand them a copy of the Fire Act. They also put up poster copies in Italian and English at all points where men congregate. By doing this and traversing their five-mile beats twice a day—once out and once back—they keep in touch with what is going on and enforce obedience to the regulations. We had no fires of any consequence on the Transcontinental last summer. This no doubt was, in a measure, due to the very wet season.

On the Canadian Northern from Ruel to Nepigon we put a ranger on every seven miles. The company had an engineer with a residency every seven miles, and one ranger was put in each residency, and the engineers and contractors were asked to see that they did their duty in patrolling the railway and render them every assistance they required. We had no fires of any consequence on this railway.

On the Algoma Central a staff of rangers was also on duty under similar instructions and no fires occurred there.

The railways that are in running order or partly in running order are the Canadian Pacific, the Canadian Northern, the Algoma Central, the Algoma Eastern. and the Temiskaming & Northern Ontario.

On the Canadian Pacific we had one ranger from the Severn north, whose duty it was to take care of the block of pine timber that grows in the Township of Wood through which the railway runs. We had another ranger on the C. P. R. from Port Arthur west, his duty being to have supervision of the track to see where ties were being burnt or any fires taking place along the line, and wherever he finds a fire to get off the train at the next station and find out all particulars about it, and

see that it is extinguished. Considerable danger has existed from carelessness in the burning of ties that have been used up and pulled out of the track, and therefore it was thought expedient to put a travelling ranger on to see that care was exercised where fire was used for this purpose.

On the Canadian Northern, from Port Arthur to Rainy River there were also

rangers placed, and no fires occurred.

On the Temiskaming & Northern Ontario Railway we had a staff of rangers from a short distance north of North Bay through the Temagami Forest Reserve. On this line the rangers follow the trains out of their districts or divisions with speeders, and great care is exercised as the railway runs through a dense body of pine. No fires occurred on this railway during the past season.

From Latchford north a considerable distance no firerangers are required, as

the railway travels through a settled region.

Further up rangers are placed again in sufficient numbers to have close supervision of the railway and to see that the regulations are observed, and if any fires occur to extinguish them immediately.

As before stated, there were on railways during the past summer 193 firerangers and 9 chiefs, making a total staff of 202.

CULLERS' EXAMINATIONS.

Cullers' examinations were held at Kenora and North Bay. Twenty-two candidates were successful at these examinations and were granted certificates authorizing them to act as cullers.

(For list of cullers who passed at the above examinations see Appendix 32, page 77.)

(For complete list of licensed cullers see Minister's report for 1911.)

CROWN SURVEYS.

The following Crown surveys have been undertaken this year.

Instructions were given for subdivision of the following townships:

Township of Drayton, at Sioux Lookout, on the National Transcontinental Railway, in the district of Kenora.

Township of Mathieu, in the district of Rainy River.

Townships of McMillan, Mulloy, Gill, Studholme, Stoddart, Kendall, Way, and parts of the townships of Hanlan and Casgrain, in the district of Algoma.

Townships of Shackleton and Sargeant and parts of the townships of Nansen and Fauquier, in the district of Temiskaming.

Also for resurveys of parts of the townships of Pardee and Crooks, and the Dawson Road Lots, in the district of Thunder Bay, and Mattawan in the district of Nipissing.

Instructions were given for subdivision of the following townships: ship outlines in the districts of Algoma, Nipissing, and Sudbury, the great majority of this work being along the lines of the Algoma Central and Hudson Bay Railway, north of the Canadian Pacific Railway, and along the line of the Canadian Northern Ontario Railway between Sudbury and Oba Junction.

Instructions were issued for survey of timber berths in the township of Mulligan, district of Temiskaming, also timber berth "G," in the district of

Temiskaming.

Instructions were also issued for survey of town plot at Armstrong, in the district of Thunder Bay, and an addition to the town plot of Hearst, in the district of Algoma.

The reports of the surveyors so far as received and examined will be found in Λ ppendices 18 to 29 inclusive, pages 49 to 70 inclusive.

MUNICIPAL SURVEYS.

On the petition of the Municipal Council of the Township of Williamsburgh, instructions were issued to survey the road allowance between the 7th and 8th concessions of the Township of Williamsburgh, from the east limit of lot 25, or the nearest undisputed monument, to the west limit of the township. Also on the petition of the Municipality of the Council of Marlborough, instructions were issued to survey the road allowance between the 6th and 7th concessions of the Township of Marlborough, in the county of Carleton, opposite lots 1, 2, 3 and 4, or as much farther as may be necessary to find an original monument and to define by permanent stone or other monuments the limits of the said road allowance. Also on the petition of the Municipal Council of the Township of Assiginack, instructions were issued to survey the rear boundary of lots 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, concession No. 2, in the Township of Assiginack, being the road allowance in rear of the lots fronting on the road to Michael's Bay, and have the same defined by permanent monuments, also in front of lots 20, 21 and 22 on the 6th and 7th concession road allowance. Also on the petition of the Council of the Township of Hinchinbrooke, to survey the line between concessions 7 and 8 from lots 9 to 13, in the Township of Hinchinbrooke.

The following municipal surveys have been confirmed under the provisions of the Revised Statutes of Ontario 1897, chapter 181, sections 14 and 15, such surveys being final and conclusive: Part of the concession line between concessions 3 and 4, in the township of East Oxford, in the County of Oxford, across lots 16 to 18 inclusive, and to define the road allowance between said concessions with stone or iron monuments. Also the concession line between concessions 6 and 7 in the Township of Elmsley North in the County of Lanark, from lots 22 to 30 inclusive, and to define the same by stone or iron monuments.

Particulars relating to these surveys will be found in Appendices 14 and 15, pages 44 and 45.

MINING AND OTHER SURVEYS.

The Mining Act of Ontario requires that applicants to purchase or lease mining lands in unsurveyed territory shall file in the Department surveyor's plans (in triplicate) of the proposed mining claims with field notes and description by metes and bounds, before any sale or lease can be carried out, and under Orders-in-Council, dated February 26th, 1906, 2nd October, 1907, 7th November, 1907, applicants to purchase islands, or locations for pleasure and summer resorts or for agricultural purposes in unsurveyed territory, are required to file surveyor's plans (in triplicate) of their islands or locations as the case may be, with field notes and descriptions by metes and bounds, together with the necessary affidavits as to there being no adverse claim by occupation or improvement, etc.

Under the above Act, Orders-in-Council and Regulations in the Districts of Parry Sound, Nipissing, Sudbury, Algoma, Thunder Bay, Rainy River and Kenora, an area of 18,428.27 acres has been sold and patented during the year, for which the sum of \$66,121.50 has been received, and an area of 15,262.99 acres has been leased for the sum of \$15,878.79 as the first year's rental.

W. H HEARST, Minister.

Department of Lands, Forests and Mines. Toronto, October 31st, 1912.



APPENDICES

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1912.

Remarks.	Resigned, Dec. 30, 1911.		Died, Sept. 2, 1912. Transferred to Northern	Development Branch June 1, 1912.
Salary per annum.	\$ c. 6,000 00 2,700 00 2,700 00 1,850 00 750 00 00 00 00 00 00 00 00 00 00 00 00 0	2,200 00 1,600 00 1,250 00 1,250 00 1,000 00 1,000 00 775 00 700 00 700 00 700 00	1,850 00 1,100 00 700 00 2,650 00 2,500 00	2,100 00 1,300 00 1,500 00 1,200 00 1,100 00 1,150 00
When appointed.	1911, Oct. 12 1882, Jan. 1 1872, Feb. 1 1912, Jan. 23 1889, May 1 1905, Jan. 1 1906, Jan. 1	1872, May 1 1903, March 6 1894, Feb. 5 1903, Jan. 1 1907, March 13 1909, March 24 1909, March 24 1912, Oct. 5 1896, Oct. 23 1907, Jan. 16 1909, March 24	1900, March 2 1907, March 13 1904, Nov. 9 1886, Jan. 30	1909, May 1 1872, May 5 1897, Sept. 27 1904, Oct. 19 1897, Jan. 15
Designation.	Minister Deputy Minister Law Clerk Minister's Secretary of Secretary to Department Stenographer Clerk and Stenographer	Chief Clerk do do do do do do do do do do do do do	Chief Clerk Clerk Stenographer Director of Surveys Surveyor and Draughtsman.	
Name.	Hon. W. H. Hearst Aubrey White Geo. Kennedy Geo. W. Yales C. C. Hele E. S. Williamson Janet Garvie James Farrington	J. J. Murphy Walter C. Cain W. R. Ledger Selby Draper S. A. Platt F. Lucas F. Laucas F. Samels W. B. Baines May Bengough Jean C. Oram Nan McQueen	R. H. Browne H. E. Johnston E. F. O'Neil G. B. Kirkpatrick J. F. Whitson	L. V. Rorke W. F. Lewis D. G. Boyd E. M. Jarvis J. B. Proctor H. Treeby
Branch.		Sales and Free Grants	Military Grants.	Surveys

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Died, Sept. 18, 1912.		Resigned, June	Resigned June 4, 1912	
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hn Work E. Blanchet L. Byrne Leaman Rushford Rirkland G. Hallday C. Armer Benson O'Connor .	S. Jones . E. Burns . S. Sutherl Carrell E. Robilla	A. G. Crozi B. Cook . Gillard . J. Niven . F. Trivett H. Hodgso Houser H. O'Neil W. Harris I. Rogers D. Meekini prence Lenn iy Thompse	G. Ross M. Lount G. Harris J. Clarke Bowland . nk Yeigh	~ .
John Work F. E. Blanch J. L. Byrne A. Leaman B. Rushford M. H. Kirkla M. G. G. Hallid E. C. Armer B. Benson .		J. A. G. Crozier J. B. Cook H. Gillard F. J. Niven W. F. Trivett W. F. Trivett J. Houser J. Houser G. W. Harris N. L. Rogers N. L. Rogers S. D. Meeking Florence Lennon Amy Thompson Mary E. Bliss	D. G. Ross H. M. Lount H. G. Harris C. J. Clarke C. Bowland Frank Yeigh	Thomas W. (R. D. Fisher
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	Patents	Wor F	₽ CC	Влге

Appendix No. 1.—Concluded.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st. 1912

	· · · · · · · · · · · · · · · · · · ·
Remarks.	Died, Dec. 6, 1911.
Salary per annum.	\$ c. 1,050 00 1,050 00 1,050 00 1,050 00 1,050 00 1,000 00 725 00 700 0 700 0 850 00
When appointed.	1906, Jan. 1 1907, March 13 1908, April 8 1907, March 13 1901, March 1 1909, March 24 1910, April 14 1906, May 16 1906, May 16 1907, March 13 1909, March 13 1909, March 13
Designation.	Clerk do do do do do do do Stenographer do do do do do do do do do do do do do
Name.	W. H. Morris R. A. Sinclair W. Lemoine A. Burritt D. H. Burr Anne Moffatt A. G. Scovell C. W. St. John Ethel Craig Flossie McDougall J. L. McNaughton H. W. Batchelor H. Brophy
Branch.	au cf Mines.

AUBREY WHITE,
Deputy Minister Lands and Forests.

D. GEO. ROSS,
Accountant.

Appendix No. 8.

List of Land Agents and Homestead Inspectors for the year ending October 31st, 1912.

Remarks.	C. 000 000 000 000 000 000 000 000 000 0
Salary per annum.	\$\$\circ\$\$ 1,200 00 00 00 00 00 00 00 00 00 00 00 00
Date of appointment.	1907, Oct. 1
District or county.	Part of Victoria Homestead Inspector Part of Frontenac and Addington Homestead Inspector and Crown Land Agent ado do Algoma do do Thunder Bay Homestead Inspector Part of District of Rainy River Part of District of Nipissing Homestead Inspector Part of District of Nipissing do do Parry Sound do do Nipissing Lake Temiskaming, District of Nipissing Homestead Inspector Part County of Peterboro Part Townplot of Alberta and part of District of Rainy River Homestead Inspector Part of District of Parry Sound do do Sudbury do do Algoma do do Algoma do do Algoma do do Algoma do do Nipissing
Post office address.	Minden Fort Frances Denbigh Bracebridge Massey Thessalon Port Arthur Sundridge Stratton Sta. New Liskeard Matheson Cochrane Cochrane Greenview Powassan Magnetawan Magnetawan Mayneson New Liskeard Chelmsford Apsley Fort Frances Murillo Emsdale Warren Warren Blezard Valley Sudbury Emo Emo Emo Emo Espanola Sta. North Bay North Bay Sturgeon Falls
Name.	Baker, R. H. Barr, James Both, Charles Brown, J. B. Byers, R. J. Buchanan, T. Burnes, C. W. Cameron, Wm. Child, F. M. Dean, Thomas Dempsay, S. J. Douglas, W. J. Freeborn, Dr. J. S. Grins, F. E. Grills, J. J. Grouix, R. J. Hughes, Thomas Jenkins, Wm. Langlois, E. Lemieux, J. A. McFadyen, Alex. Mulvaney, N. Parsons, W. J.

Appendix No. 2.—Concluded.

List of Land Agents and Homestead Inspectors for the year ending October 31st, 1911.-Continued.

	METORI OF 11
Remarks.	Also Mining Recorder. Died, May 13, 1912.
Salary per annum.	\$ 6.7
Date of appointment.	1907, May 31. 1905, July 12. 1906, May 7. 1909, March 1 1912, April 16 1910, June 30. 1909, Sept. 21. 1869, May 28. 1905, May 28. 1905, May 31. 1905, May 10. 1906, May 10. 1906, May 10.
District or county.	art of District of Parry Sound do Renfrew istrict of Rainy River omestead Inspector art District of Algoma omestead Inspector art District of Nipissing do do Rainy River do Hastings do Peterboro do Peterboro art of St. Joseph Island do District of Nipissing
Post office address.	Parry Sound Wilno Dryden Sturgeon Falls Sault Ste. Marle Cochrane Mattawa Kenora L'Amable Kinmount Pembroke New Liskeard Marksville Englehart
Name.	Powell, F. R. Parry Sound Prince, Adam Wilno Dryden Dryden Dryden Dryden Pronger, R. H. Sturgeon Falls Bothwell, B. Sault Ste. Marie Prongent, Dalton Cochrane Smith, Dalton Mattawa Prait, J. R. L'Amable Tait, J. R. L'Amable Tait, J. R. L'Amable Walson, James Pembroke Warsen, D. B. Pembroke Watson, T. P. New Liskeard Hwybourne, W. E. Marksville Preglebart Mollings, J. Englebart Prepronger Preglebart Preglebart Prepronger Preglebart Prepronger Preglebart Preglebart Prepronger Preglebart Prepronger Preglebart Prepronger Prepronger Preglebart Prepronger

D. GEO. ROSS
Accountant.

AUBREY WHITE, Deputy Minister Lands and Forests.

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections for the year ending October 31st, 1912.

Service.	Acres sold and leased.	Amount of sales and leases.	Collection on sales and leases.	
Lands Sold:		\$ c.	\$ c.	
Agricultural and Townsites	349,319.28	272,233 08	218,710 29	
Mining	18,971.96	45,552 18	51,634 48	
Clergy	101	110 00	1,565 92	
Common School	2.50	94 00	7,121 25	
Grammar School			292 55	
University	11,890.50	6,855 80	4,263 39	
Lands Leased:				
Mining	16,711.85	17,316 65	33,098 34	
Crown	15,793.50	2,157 50	18,931 82	
£*				
	412,790.59	\$344,319 21	\$335,645 04	

D. GEO. ROSS.
Accountant.

AUBREY WHITE.
Deputy Minister Lands and Forests.

Appendix No. 4.

Statement of Revenue of the Department of Lands, Forests and Mines for the year ending October 31st, 1912.

Service.	\$ c.	\$ c.	\$	c.
LAND COLLECTIONS. Crown Lands: Agricultural Townsites Mining	181,894 64 36,842 65			
Clergy Lands Common School Lands Grammar School Lands University Lands	1,565 92 7,121 25 292 55 4,263 39			
Rent: Mining Leases Crown Leases	33,098 34 18,931 82		- 1	
Miners' Licenses Permits Recording Fees Royalties	56,147 75 1,780 75 49,234 20		-	
Supplementary Revenue: Acreage Tax Profit Tax Gas Tax	15,770 62 155,506 86 19,598 05			
Woods And Forests. Bonus Timber Dues Ground Rent		540,702 85 1,339,957 12 96,262 81	883,828	92
Transfer Fees	654 00 655 47	8,740 00	1,985,662	7 8
Cullers' Fees Algonquin Park Rondeau Park Forest Reserves	7,610 05 489 65 778 80	1,433 47		
REFUNDS.	170 00	8,878 50	10,311	97
Wood Ranging Fire Ranging Surveys Contingencies Diamond Drill Agents' Salaries Mining Recorders		5,751 67 13,821 88 74 77 60 00 208 25 468 50 16 00	20,401	07
		\$	2,900,204	

D. GEO. ROSS,

Accountant.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year ending October 31st, 1912, which are considered as Special Funds.

Service.	\$	c.	\$	c.
,				
Clergy Lands.				
Principal. Interest.		5 59 9 33	1,5	65 92
. Common School Lands.				
Principal	2,308 4,817	3 28 7 97	7,1	21 25
Grammar School Lands.				
Principal) 80 l 75	292	55
University Lands.				
Principal. Interest	4,14	1 07 9 32	4,263	39
			\$13,243	11

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines for the year ending October 31st, 1912.

Service.	\$ _ c.	\$ c	\$ c.
Agents' Salaries and Disbursements.			
Land, \$15,374.84.			
Baker, R. H Disbursements	350 00 8 30	070 00	-
Both, C. Brown, James B. Disbursements		358 30	
Buchanan, Thomas Disbursements	300 00 4 52	1,035 96	,
Burrows, W. A. Disbursements	369 50 18 45	304 52	
Byers, R. J		387 95	
Child, F. A	190 75 50 45	505 25	
Cameron, Wm	500 00 39 75	241 20	
Dempsay, S. J	500 00 54 35	539 75	
Douglas, W. J. Ellis, H. J.		554 35 175 70 500 00	
Freeborn, J. S. Disbursements Ginn, F. E.	309 25	514 50	,
Disbursements	500 00	373 30	
Disbursements Hollands, C. J.	78 95	578 95 300 00	
Hales, W	500 00 7 87	250 00	
Langlois, E	500 00 4 06	507 87	
Lemieux, J. A. Mulvaney, N. Disbursements	41 66 38	504 06 400 00	
McFayden, A. Disbursements	500 00 81 91	42 04	
MacLennan, J. K. Disbursements	500 00 69 85	581 91	
		569 85	
Carried forward		9,325 46	

Service.	\$	c.	\$	c.	\$ c.
Brought forward			9, 325	46	
AGENTS' SALARIES AND DISBURSEMENTS-Continued.					
$Land\!$					
Oliver, J. A. (Acting) Parsons, W. J. Disbursements	500	 00 00	130	50	
Philion, J. A		00 18	517	00	
Powell, F. R	500	00 00	520	18	
			516	00	
Prince, A. Disbursements		00	517	00	
Pronger, R. H		80 43			
Rothwell, B. J	300	00 00	506	23	
Small, R Disbursements		00 56	309	00	
Spry, W. L. Disbursements	400 523	00	505	56	
Tait, J. R			923 324		
Warren, D. B. Disbursements	300	$\frac{00}{25}$	021	50	
Whybourne, W. E	250	00 41	314	25	
Wilson, J	150	00	253	41	
Disbursements		20	166	20	
Woollings, Jos	500 46	$\frac{00}{00}$	5.10	00	
Homestead Inspectors, \$10,524.41			546	00	
Barr, James	1,200 639				
Burnes, C. W	900	00 .	1,839	15	
Chester, T. Disbursements	1,200	00	1,606	20	
Dean, T	$\frac{279}{600}$	00	1,479	80	
Disbursements		05	651	05	
Groulx, R. J. Disbursements	600 733		1,333	80	
Carried forward			22,284		

Service.	\$ c.	\$ c.	\$ c.,
Brought forward		22,284 84	
AGENTS' SALARIES AND DISBURSEMENTS—Continued.			
Homestead Inspectors.—Concluded.			-
Hughes, Thos	650 00 320 65	970 65	-
Quenneville, I	600 00 49 80	649 80	
Smith, Dalton	415 35 115 35	530 70	
Watson, T. P	915 00 548 26	1,463 26	•
Timber, \$27,630.94.			
Christie, W. P	1,600 00 383 59	1 002 50	
Hawkins, S. J	1,400 00 354 06	1,983 59	-
Henderson, C. Webster, W. A. Disbursements	$\begin{array}{c} 1,800 \ 00 \\ 800 \ 00 \\ 446 \ 10 \end{array}$	1,754 06	
Johnson, S. M	1,600 00 176 28	3,046 10	
McDonald, H	1,400 00 391 75	1,776 28	
McDougall, J. T	1,600 00 304 10	1,791 75	
MacDonald, S. C. Disbursements	1,600 00 179 05	1,779 05	
Margach, Wm. Legris, John Disbursements	1,600 00 1,241 66 2,129 97	4,971 63	
Maughan, Jos	1,400 00 529 68	1,929 68	,
Oliver, J. A. Penfold, G. S. Disbursements	1,500 00 733 36 852 51		
Stevenson, A	1,400 00 437 20	3,085 87	
Watts, G	1,500 00 271 63	1,837 20	
Carried forward		53,530 19	

Service.	\$ c.	\$ c.	\$ c.
Brought forward		53,530 19	
AGENTS' SALARIES AND DISBURSEMENTS—Concluded.			
Miscellaneous, \$1,455.66.			
Ames, D. H., Caretaker Islands in Dog and Loughborough Lakes Bilton, Geo., Caretaker Islands in North and South Crosby Coveney, E., Valuating Lots in Sandwich East Davis, S., Caretaker Islands in Leonard Lake Guthrie, Wm., Caretaker Islands in Devil's Lake. Giroux, F. A., Inspecting Township of Lorrain. McArthur, T. A., Inspector of Agencies Disbursements		20 00 25 00 25 00 20 00 25 00 71 00	
McKelvey, Wm., Inspection of Lots in Hardy and McConkey		440 26	
Scott, John, Inspecting Township of McConkey		115 00	54,985 85
OTTAWA AGENCY.			94,909 09
Darby, E. J., Agent Larose, S. C., Clerk Rent Disbursements	500 00 95 41	1,500 00 1,000 00	
WOOD RANGING.		595 41	3,095 41
Allen, R. A	$^{1,080\ 00}_{100\ 45}$	1 100 47	
Almon, J. E. Ainslie, D. Ansley, W. E. Ansley, J. J. Arnell, Wm. Bailey, S. I. Barrett, Thos. Disbursements		1,180 45 332 00 675 00 750 00 317 50 695 00 905 00	
Barins, P. Bates, R. Baulk, G. R. Bedome, W. E. Benham, W. E. Berlinquet, J. Binnie, T. Bliss, L. E. Disbursements		823 00 60 00 136 00 380 00 312 00 120 00 188 00 805 00	
Boussineau, Peter Bremner, Geo. Brown, J. T. Buckan, S. Buchan, H. Buie, D. Buisson, Wm. Burns, Gordon G. Burns, W. S.		1,768 91 141 00 400 00 1,008 00 324 00 539 42 938 27 765 00 228 00 205 50	
Carried forward		13,997 05	58,081 26

Service.	\$ c.	* \$ c.	\$ c.
Brought forward		13,997 05	58,081 26
Wood Ranging Continued.			
Callahan, T		500 00	
Canose, J		$162 00 \\ 175 50$	
Carter, Geo		565 00	
Castonguay, A. C		$835 \ 00 \ 81 \ 00$	
Chenier, D. A.		655 00	
Clarke, D		564 00	
Comer, B. F		$\begin{array}{c} 484 & 00 \\ 1,210 & 00 \end{array}$	
Coyne, Phin.		885 00	
		317 50	
Cross, R. J		$536 00 \\ 147 00$	•
Didier, H		770 00	•
Dougherty, R		50 00	
_ =		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Durrell, Wm		1,240 00	
Duval, C. A		$605 00 \\ 815 00$	
Fiddes, J.		444 00	
Fisher, Geo.		765 00	
Fraser, D		895 00 360 00	
Fraser, T		117 00	
Gamey, W. H		620 00	
Gilligan, E.		$\begin{array}{c c}24&00\\6&00\end{array}$	
Gorman, J. P		552 50	
Hagan, E. G		550 00 416 00	
Hartley, Chas.		1,175 00	
Hawkins, H. C.		575 00	to T
Henderson, Chas		$\begin{array}{c c} 107 & 15 \\ 3 & 00 \end{array}$	•
Hey, B		220 00	
Huckson, A. H		1,275 00	
Irving, Ed		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Johnston, T		158 00	
Kelso, Robt. Kernahan, G. A.	• • • • • • • • • • • • • • • • • • • •	$\begin{array}{c c}3&00\\192&00\end{array}$	
Kerby, D. F		675 00	
Lee, J. B		740 00	
LeRoy, J. H. Lockhart, Jas.		804 00 6 00	
Londry, W. E		539 42	
Long, H. E	780 00		
-	212 15	992 15	
Lowe, W. E		484 00	
MacDonell, R. D		588 00 795 00	
Margach, Wm., Disbursements		338 93	
Margach, J. A. Disbursements	680 00		
= 2.2.2 HI DOMOILUS	19 10	699 10	
Claumical townsand	-		F0 001 0
Carried forward	Į.	41,644 30	58,081 26

Service.	\$ c.	\$	c.	\$	c
Carried forward		41,644	30	58,081	20
Wood Ranging.—Continued.					
Manice, Wm		1,185	00		
Maughan, J., Disbursements		149	44		
Menzies, Alex	• • • • • • • • • •	880 995			
Molyneaux, G		860			
Mooney, L		310			
Morel, H		395 560			
Muckle, J		132			
Murray, Wm		1,420			
McAuley, W. D	1.565 00	611	54		
Disbursements	62 32				
McCaw, J. E		1,627			
McDonald, A. J.	1.252 00	595	00		
Disbursements	70 20				
McDonald, J		$\frac{1,322}{306}$			
McDonald, J. D		$\frac{300}{1,345}$			
McDonald, Thos		541	85		
McDonald, A		504 560			
McGregor, C. F.		505			
McIvor, J. A		480			
McLaughlin, J		$\frac{200}{820}$			
McKenzie, R.		632			
McKinley, J. H		580			
McNabb, Alex		$850 \\ 1.540$			
Nault, Jas			00		
Nevison, R. H		284			
Vewburn, Wm		$\frac{660}{245}$			
O'Donald, C		55	00		
Oliver, J. A., Disbursements			00		
D'Malley, D		938	$\begin{array}{c} 50 \\ 27 \end{array}$		
Patterson, Malcolm		141	00		
Pigott, J	• • • • • • • • • • • • • • • • • • • •	1,060	$\frac{00}{00}$		
revost, D		110			
Pronger, H		141	00		
Purdy, John		655 1.544			
Ridley, R		1,044 $1,040$			
Ritchie, J. A		640	77		
Robertson, J. A	• • • • • • • • • •	$\frac{460}{219}$			
Ross, S.		880			
Rowe, F. E	• • • • • • • • • • •	452	00		
Rushworth, Chas	780 00	60	00		
Disbursements	3.50				
Sandarson Coo			50		
Sanderson, Geo	• • • • • • • • • • • • • • • • • • • •		00 00		
Carried forward		72,451	03	58,081	. 2

Service.	\$ c.	\$ c.	\$ c
Brought forward		72,451 03	58,081 26
Wood Ranging—Concluded.			
Sharpe, J. A.		1,560 00	
Shaw, Geo.		$\begin{array}{c} 80 & 00 \\ 648 & 00 \end{array}$	
Shaw. Alf.		510 00	
Shields, F		616 00	
Shilling, H. Short, J.		$165 00 \\ 360 00$	
Simmons, A. G		608 00	
Simpson, Wm. Smith, J. D. C.	• • • • • • • • • • • •	770 00 528 00	
Smith, V		48 00	
Smith, D		12 00	
Stein, P		621 15 508 00	
Stewart, J		384 00	
Thomson, W. B.	$\begin{array}{cccc} 520 & 00 \\ 14 & 50 \end{array}$		
Disbursements	14 50	534 50	
Thompson, G. S.		880 00	
Thorp, Thos. Tucker, L. A.		$\begin{array}{cccc} 290 & 00 \\ 460 & 00 \end{array}$	
Turpin, T.		27 50	
Urquhart, A		855 00 295 00	
Vanier, John		1,125 00	
Wagner, F		376 00	
Watts, Geo., Disbursements		$\begin{array}{c} 12 \ 45 \\ 432 \ 00 \end{array}$	
Watts, J. J.		132 00	
Webster, W. A		775 00	
Whalen, P. J. White, A. P.		$1,435 00 \\ 645 00$	
Wilkins, G. N.		870 00	
Wilson, Dan		715 00 609 43	
Yuill, T		825 00	
Yuill, J. A		$65 00 \\ 185 00$	
Yuill, A. D. Young, R. J.		340 00	
			91,753 66
EXPLORATION AND ESTIMATION OF TIMBER BERTHS			
Annis, Victor		8 00	
Chenier, D. A.		84 00	
Dulmage, James		7 50 75 00	
Henderson, Chas., Disbursements		517 32	
Margach, J. A. McDonald, J. D.		19 00 50 00	
McLaughlin, J		20 25	
Mooney, L		98 00	
Presley, J		22 50 98 11	
Webster, W. A Disbursements		$62 \ 50$	
	-		1,062 18
Carried forward			150,896 50

Service.	\$	c.	\$	c.	\$ 0
Brought forward					150,896 5
FIRE RANGING.					
Adams, A			382	50	
Allen, D			385		
Anger, L			$\begin{vmatrix} 377 \\ 296 \end{vmatrix}$		
Annis, Jas			160		
Armstrong, T. C.		• • • • •	317		
Armstrong, G. D	• • • • • • •	• • • • •	$\frac{360}{382}$		
Ault. J. C.			357		
Austin, P			270		
Aylward, J		• • • • •	620		
Bailey, H. Bain, L			$\begin{array}{c} 207 \\ 382 \end{array}$		
Baker, H. S			382		
Baker, O			265		
Baker, D. M			380		
Barbeau, J			$\begin{array}{c} 296 \\ 142 \end{array}$		
Bellanger, E.			296		/
Bennington, J. D			294	00	
Bentham, W. G.			382		
Berry, Geo. B			352 (296 (
Bertram, J.			332		
Bertrand, H			385		
Binnie, T	• • • • • • •	• • • • •	368		
Bisaillon, C. H	895		85 (,00	
Disbursements	594			1	,
D			1,489		
Bisaillon, James	• • • • • • •	• • • •	$\frac{307}{170}$ 6		
Bissonette, R. J.			282		
			318 (00	
Blaise, O			300 (
Bliss, L. E., Disbursements			492 1 322 5		
Boccard, Adolph			305 (
Bonin, A			382 5		
Bonter, S. Bookhout, H.			387 5	1 1	
Bottrell, D	<i></i>		$\frac{405}{352} = \frac{6}{5}$		
Boulanger, P			207 5		
Brasher, S. M.			382 5		
Brown, T. E. Brown, A.			$\begin{array}{c} 365 & 0 \\ 282 & 0 \end{array}$		
Brown, P. R.	· · · · · · · · ·		295 0		
Brown, Thos.			232 5		
Brooks, A			500 0		
Brozeau, A			$\frac{382}{382} \frac{5}{5}$		
Brunet, A			382 5		
Bruce, Geo			$327 \ 5$	0	
Buchanan, R. F.			382 5		
Burnham, H. H. Burger, Wm.			332 5 372 5		
Burns, Robt.			$\frac{312}{252} \frac{3}{0}$		
Carried forward		-		—- -	150.000 =::
. Carried forward		• • • •	19,350 7	1	150,8 96 50
		- 1		1	

Service.	\$ c.	\$ c.	\$ c.
Brought forward		19,350 71	150,896 50
FIRE RANGING.—Continued.			
Burns, W. S		632 00	
Burrows, C. S	• • • • • • • • • • • • • • • • • • • •	190 00	
Callahan, A. S		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Cameron, W. J		370 00	
Campbell, Duncan		420 00	0
Campbell, R		282 00 387 50	
Capp. S		382 50	
Cavanagh, S		220 00	
Ceaser, H. P		387 50 380 00	
Chapman, Wm.		282 00	
Christie, W. I	423 00		
Disbursements	· 105 75	F00 55	- •
Christie, W. P., Disbursements		528 75 138 09	
Chittick, W. J.		407 50	,
Clark, Harry		382 50	
Cobb, C. E		288 00	
Combs, F. H.		312 50 335 00	
Contryman, J. G.		282 00	
Coombs, J		284 00	
Cooper, A. W		268 00	
Copley, J. D		202 00 382 50	
Cousineau, A		390 00	
Cox, J. H		282 00	
Coyne, P	$765 00 \\ 273 98$		
Disbursements	215 96	1,038 98	
Craigie, H		382 50	
Cridford, W. G.		282 00	
Cullane, D		262 00 167 50	
Darlington, E.		247 50	-
Davidson, L		272 50	
Davison, Ira		387 50	
Davis, J		100 00 407 50	
Deschamp, F		382 50	
Dial, A. C.		299 50	
Didier, H		387 00 296 00	
Donald, R.		167 50	
Dougherty, A. E		387 50	
Dubbiday, John		290 00	
Duff, R. A Duncan, R		$\frac{430\ 00}{368\ 50}$	
Durfey, L. H		335 50	
Drew C		268 00	
Dyson, W		390 00	
Eastwood, J		15 00 7 00	1
Eilber, George		382 50	
Elliott, A		337 50	1
Carried forward		36,646 53	150,896 50
curred jornard		50,040 00	100,000 00

	1					c.
Brought forward			36,646	53	150,896	3 50
FIRE RANGING.—Continued.						
Elliott, G.			221			
Elliott, Jac Ellis, E. C			$\begin{vmatrix} & 365 \\ & 370 \end{vmatrix}$			
English, M.			382			
English, John			280			
Fairbairn, N. H			$\frac{528}{380}$			
Ferguson, George Ferguson, Thomas H.			370			
Fisher, George			524		ı	
Fitzbock, John			210		ı	
Fitzgerald, Robert			$\frac{266}{298}$			
Flannagan, James			194			
Forsyth, W. W			10			
Francey, George			292			
Fraser, W. A			387	50		
Disbursements	895					
			1,069	69		
Gale, W. J	• • • • • • •		387			
Galt, J			$\frac{310}{310}$			
Gault, James			$\frac{310}{231}$			
Gauthler, Theo.			407			
Gemmell, John	564					
Disbursements	164	50	728	50		
Gillanders, G			235			
Gladd, Albert			210			
Gliddon, G. C.			268			
Glover, Ed			296 282			
Godin, Ed			324			
Gordon, T. S			148			
Gorman, J. P.			484			
Gunn, M. G. Guthrie, Wm.			$\frac{125}{390}$			
Hackett, Wm.			385			
Hamilton, A. J.			196			
Hamilton, Robert			• 272			
Hammond, W			$\frac{372}{282}$			
Hand, Thomas			564			
Hankshaw, Wm			140			
Hanks, F	• • • • • • •	••••	$\begin{array}{c} 352 \\ 375 \end{array}$			
Harrison, W. H.			168			
Hatch, B			99			
Hawkesbury Lumber Co			256			
Hayes, J. L. Henderson, Charles	• • • • • • •	• • • •	$\frac{272}{680}$		•	
Henderson, C. E.	• • • • • • •		267			
Henderson, G			283	25		
Henderson, John	• • • • • • •		240 (
Hennessy, Wm. Henrey, Alex.	• • • • • • •	• • • •	$\frac{106}{282}$ (
Higgins, Robert	• • • • • • •		308			
						_
Carried forward	• • • • • • •	• • • •	53,834	30	150,896	50

Service.	\$ c.	\$ c.	\$ c.
Brought forward		53,834 30	150,896 50
FIRE * RANGING.—Continued.			
Hollis, J		300 00	
Hornick, George		000 =0	
Hough, J. A		00 00	
[rish, W			
sbister, J. A		0== 00	
James, F		000 00	•
Jarvis, Edgar	1	005 50	
Jenkin, S	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Dispuisements	32 00	368 00	
Johnson, G. N			
Johnston, Wm		0-4-00	
Keily, Charles A		. 385 00	_
Keily, M		00000	
Kerr, Alex		1	
Lalond. E	1	372 50	
Lalond, J. M		040.00	/
Langtree, John			
Laurin, J. A		. 385 00	
LeBlanc, Oliva LeBlanc, Oliver		F0.1.50.0	4
Leclaire. S	1	000 00	
Lee, J. B	835 00 235 60		
		1,070 60	
Lennox, T. A			
Leo, Charles		100 00	
Leppard, Fred		0=000	
Levis, J. A		050 00	
Locheed, R. W		387 50	
Lockhart, W. H	765 00	. 380 00	
Disbursements			
T Debent		958 63	
Loys, Robert Lutton, B. M			
Lyons, R		. 282 50	
MacDonald, Ed		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
MacDonell, L. P	1	. 387 50	
Macdonell, R. D	1	. 564 00	
MacNeill, E. R			
Margach, J. A		. 332 00	1
Marshall, J. A		. 290 00	
Marston, W		. 382 50	
Martin, E. M		300 00	
Mason, Alex		370 00	
Carried forward	1	70,896 41	150,896 50

Service.	\$	c.	\$	c	\$ 0
Brought forward			70,896	41	150,896 5
FIRE RANGING.—Continued.					
May, H	860	00			
Disbursements	210	29	1,070	20	
May, Alex.			172	5 0	
Menzles, A	. .	• • • •	448 388		
Merchant, H.		• • • •	397	50	
Miller, R			357 84	50 00	
Milway, J. H			412	00	
Minher, D		• • • •	296 423		
Montgomery, R			280	00	
Montgomery, T. P			$\frac{385}{370}$		
Mcrand, L	• • • • • •		387	50	
Morin, John			$\frac{385}{236}$		
Moore, James			260	00	
Moore, B. F. Moody, H. D.			385 335		
Mowell, John			65	00	
Murphy, Pat. Murphy, Pete			$\begin{array}{r} 185 \\ 185 \end{array}$		
McArthur, J. A			380	00	
McCullough, D. J.			$\frac{370}{395}$		
McDonald, T			264	00	
McDougall, J. T., Disbursements			$\begin{array}{c} 17 \\ 296 \end{array}$		
McIver, H			382	50	
McKenzie, A			363 368		
McKinnon, H			382	50	
McLaren, W. A. McLaren, Alex.		• • • •	382 387		
McLaughlin, John			367	50	
McMeekin, S. McPhee, D. J.			305 370		
McMullin, S. J.		1	382	50	
McMae, D. A.			$\frac{380}{387}$		
Nadon, D			367	50	
Neilly, L. M. Neelon, G. M.			$\begin{array}{c} 155 \\ 387 \end{array}$		
Newburn, Wm			564	00	
Newell, John Newhouse, Alex.		1	$\frac{300}{302}$		
Niely, W			383	75	
Ojick, J			$\frac{290}{372}$		
Oliver, J. A., Disbursements			222	31	
O'Malley, D. Onegut, J.		1	$\frac{198}{237}$		
Ouellette, F			385	00	
Patterson, H. L. Pigeon, C.	• • • • • • •	• • • •	385 356		
Carried forward		1.			150 000 50
Carried forward	• • • • • • •	• • • •	89,493	51	150,896 50

Service.	\$ c.	\$ c.	\$ c.
Brought forward		89,493 31	150,896 50
FIRE RANGING.—Continued.			
Pingle, A	• • • • • • • • • • • • • • • • • • • •	387 50	
Powell, George		375 00	
Powell, N. L. Prevoust, D.		$\begin{array}{c c} 387 & 50 \\ 216 & 00 \end{array}$	
Proulx, A		387 50	
Quick, W. G		365 00	
Quilty, J		200 00	
Radcliffe, R. A		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7
Redden, M. A.		387 50	
Read, C. F.		350 00	
Reeves, E. H. Remus, Charles		370 00	
Rennon, James		$\begin{array}{cccc} 266 & 00 \\ 187 & 50 \end{array}$	
Reynolds, M		287 50	
Richardson, S		352 50	
Richardson, John		382 50	4
Rodden, M. J		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-
Rochford, A.		385 00	
Rogers, R.		32 50	
Ross, W		370 00	
Rushworth, C. E. Rusk, O	632 00	287 50	
Disbursements	542 25		
		1,174 25	
Russell, A		300 00	
Saunders, H. A. Sauve, J.		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Savard, A.		382 50	
Schenk, Nelson		382,50	
Schneider, C. Scully, James		297 50	
Scott, Robert		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Seline, A		2 25	
Seline, F		2 25	
S'eline, J. Sharpe, J		$\begin{array}{ccc} 2 & 25 \\ 382 & 50 \end{array}$	
Shields, H. R.		370 00	
Shields, F		282 50	3
Shilling, H.		155 00	
Shore, D. Sherlock, S		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Simpson, A.		349 25	
Skidmore, T. B.		370 00	
Small, M. A.		360 00	
Smith, H. S'. Smith, V.	• • • • • • • • • • • •	$\begin{array}{ccc} 305 & 00 \\ 267 & 00 \end{array}$	
Smyth, J. J.		367 50	
Snatch, Joseph		132 50	
Snider, S. H.		380 00	
Spearing, Fred. Spearman, T.		$egin{array}{cccccccccccccccccccccccccccccccccccc$	
Spence, E. J.		5 00	
Spence, D		352 50	
Spillett, J. J.		365 00	
Spillett, A. J.		365 00	
Carried forward		107,078 06	150,896 50
Area.		J	

Service.	\$	c.	\$	c.	\$	c.
Brought forward			107,078	8 06	150,896	50
FIRE RANGING—Concluded.						
Stewart, Charles			370	00		
Stevens Alex			1	7 50		
Storey V				2 50		
Storey Wm.				5 00		
Stubbington, F. J		• • • • •		3 00		
Sturdy, G. R		• • • • •		00 (
Sutherland, R. A				00		
Sutton, G				00 2 50		
Switzer, D				50		
Thomas, Finite	572		971	50		
Disbursements	238					
2 isom sometres			810	95		
Thompson, J. H				2 50		
Гооke. S				50		
Foomer, S				00	-	
Tower, O				00		
Tremblay, Emelien		• • • • •		5 00		
Fremblay, E	• • • • • • •	• • • • •		7 50 5 00		
Frollope, HenryFwigg, J. F		• • • • •		00		
Tye, R. H.			345	5 00		
Jrlin, W. R.				5 00		
Urquhart, A				00 -		
Irquhart, J				00		
Valentine, D			85	00		
Volois, P				00		
Walker, G		• • • • •		50		
Wallace, W. F				00		
Ward, W. D				00 2 50		
Washburn, B Watson, R. W				00		
Watts, George, Disbursements				2 48		
Waugh, J. K.				6 00		
Webster, R. D.		 		00		
West, W			312	50		
Whaley, G			385	00		
Whalley, H				00		
Vhiteoak, D		• • • • •		50		
Whitock, H. W.		• • • • •		00		
Vier, S				00		
Vier, G Vilkins, D. E				$\begin{bmatrix} 00 \\ 00 \end{bmatrix}$		
Wilkins, G. N.				00		
Williams, R. E				00		
Vilson, James				50		
Wilson, J. G	İ		327	50		
Wilson, H. J	 .			50		
Winn, J				50		
Wood, H. C				00		
Wood, W. D				00		
Vooden, John Voodcock, G.		• • • • •		00 50		
Wright, J. S.		• • • • •		25		
					124,483	7
					955 900	_
Carried forward					275,380	2
			1			

Service.	\$	c.	\$	c.	\$	c.
Brought forward					275,380	24
Forest Reserves.					-	
Temagami Reserve—\$46.394.96.						
Temagami Reserve—\$46.394.96. Albright, L. Albright, A. J. Barr, James Barrett, Thomas Disbursements Barraclough, W. W. Benoit, E. Bertrand, O. Biederman, Wm. Bibet, L. A. Bissett, J. Boivin, J. Bresebois, P. Brown, J. F. Buisson, W. Campbell, G. L. Clement, F. W. Clemow, F. Coghill, R. Cook, W. F. Corbett, G. E. Davidson, R. D. Deacon, A. D'Embremont, F. Derosiers, John Downs, George Duff, H. D. Duff, J. H. Duisetti, T. Dunston, G. Egan, Wm. Evans, J. J. Faeris, R. Disbursements Farmer, J. F. Flannagan, Ed. Forsyth, G. Fox, W. W. Galligan, J. B. Gauthier, O.	763	1 00 8 00	367 837 981 300 352 305 295 277 376 365 367 367 277 437 368 369 369 369 361 361 361 361 361 361 361 361 361 361	50 50 50 63 60 60 60 60 60 60 60 60 60 60		
Graham, Jas. E. Grenier, Jas. E. Goodearle, W. E. Haines, Herb. Harrison, J. W. Hayden, G. F.			23 36 32 36 43 43	0 00 7 50 0 00 7 50 5 00 0 00		
Henderson, C., Disbursements Herlihy, D. Higgins, L. T. Higley, C. E. Hindson, C. E. Disbursements	1,80	00 00 00 62	36 36 29	7 56 7 50 7 50 5 00		
			2,06	0.62		

	1			J		
Brought forward			20,233	81	275,380	24
Forest Reserves.—Continued.						
Temagami Reserve-Continued.						
Hogan, M. A. Holland, B. J. Jocko, J. Johnston, Jas. Johnston, W. J. Keefer, N. S.			320 147 277 360 292 297	50 50 00 50		
Kelly, T				50 00 50 50		
Lamarche, A. Landeront, J. P. Latoure, John Legree, V. Livingston, J. A. Lyon, J. W.			915 362 367 362 317 350	50 50 50 50		
Marks, V. Marshall, A. C. Mason, D. M. Maynard, W. B. Montgomery, A.			370 365 367 295 397	00 00 50 00		
Monville, M. Moore, C. A. Moran, O. Morel, H. MoClennagan, A. R.			342	50 00 00 50		
McCost, H. McGregor, P. McGuire, H. McIntyre, D. S. McKay, Angus			102 342 170 237	50 50 50 00 50		
McLaughlin, John McLeod, J. D. McNeilly, Mat. McPhee, H. A. McPherson, J. B.		• • • • • • • • • • • • • • • • • • • •	367 347 347 292	50 50 50 50 50		
Nadon, P. Neil, W. Nicholas, Herb. Nixon, John O'Neil, W. S.			365 367 365 360	5 00 5 00 7 50 5 00 9 00		
Papineau, Jos. Petrant, T. Petrant, Wm. Philpott, G. M. Pointer, R. R.		• • • • • •	15 332 367	00 5 00 2 50 7 50 9 00		
Powell, John Prudhomme, W. A. Raymond, Ad. Rochon, Jos.		• • • • • •	315 370 360 915	00 00 00 00 00		
Rochon, F. Rodgers, Walter Sage, P. Sage, J. F.			367 362	5 00 7 50 2 50 9 00		
Carried forward			38,811	31	275,380	24

Service.	\$	c.	\$	c.	\$ c
Brought forward			38,811	31	275,380 2
FOREST RESERVES.—Continued.					
Temagami Reserve.—Concluded.					
Sargeant, W. B.			367	50	
Sassiville, L			360		
Shannon, R. J.			367 135		
Shelson, H			367		
Spence, Wm			347 367		
fromblay, E.			247		-
Furner, John			112 915		
Vivaris, M			365	00	
Wagner, H. W			$\frac{362}{102}$		
Williams, Chas:			305	00	
Willoughby, J. B			332 362		-
Winder, A.			365		
Whitney, K. H			330	00	
Young, R. J	814 657				
Metagami Reserve—\$8,723.86.			1,471	15	
Ainslie, D.			352	50	
Bracken, R			365		
Bruster, H. S			302	50	
Burden, John Disbursements	$835 \\ 344$				
- Jundon Gos			1,179		
Dundas, Geo			$\frac{257}{32}$	50	
Fraser, E. E			392		
Gowinlock, R. W			$\frac{127}{285}$		
Henderson, C. E			172	00	
Lawrence, C. F	• • • • •	• • • • •	335 327		
zuke, A			132	50	
Manerd, Napoleon	• • • • • •	• • • • •	272 355		
Poisson, A.			365		
Reid, Jos			392 310		
Smith, W. R			367		
Stewart, D			307		
Taylor, J. S. Chorpe, G. H.			367 362		
nursion, A. M			370	00	
Wallace, J. B.Wallace, W. W.	• • • • • •	• • • • •	$\frac{327}{342}$		
Wood, E. H.	• • • • • •		322 322		
Mississaga Reserve—\$11,965.01.					
Albright, L.			7	50	
Arnill, L			7	50	
Belanger, Thomas			182		
Carried forward		ĺ	55 316	32	275,380 24

Brought forward 55,316 32 275,380 24		Service.	\$	c.	\$ c.	\$ c.
Mississaga Reserve.—Concluded. 290 00 Bikell, R. R. 225 00 Blaney, A. 225 00 Rondon, F. H. 295 00 Bothwell, G. E. 267 50 Burden, Wm. 400 00 Burden, J. H. 172 50 Cameron, Geo. 352 50 Cameron, B. 302 50 Copp, F. C. 292 50 Coyper, J. W. 285 00 Dean, T. B. 202 50 Doolittle, G. W. 250 00 Dovel, C. A. 285 00 Dovel, C. A. 285 00 Doval, C. A. 85 00 Disbursements 1,691 51 Dyson, Isaac 225 00 Edwards, H. S. 222 50 Eveline, J. 225 00 Eveline, J. 223 00 Eveline, J. 225 00 Eveline, A. 223 00 Eveline, J. H. 160 00 Ferguson, Julien 350 00 Ferguson, Julien 350 00 Ferguson, J. B. 265 00 Foot, W. S. <td>Brought</td> <td>forward</td> <td></td> <td></td> <td>55,316 32</td> <td>275,380 24</td>	Brought	forward			55,316 32	275,380 24
Bilaney A. 225 00	Fores	T RESERVES.—Continued.				
Blaney, A	Mississ	saga Reserve.—Concluded.				
Dean, T. B. 202 50	Blaney, A Bondon, F. H. Bothwell, G. E. Burden, Wm. Burden, J. H. Cameron, Geo. Cameron, B Copp, F. C				225 00 295 00 267 50 400 00 172 50 352 50 302 50 292 50	,
Dyson, Isaac 300 00 Edwards, H. S. 272 50 Eveline, J. 225 00 Eveline, A. 230 00 Eveline, J. H. 160 00 Featherstonhaugh, M. H. 300 00 Ferguson, Julien 350 00 Ferguson, J. B. 262 50 Foot, W. S. 265 00 Gordon, R. 290 00 Hall, J. E. 167 50 Haskell, H. R. 302 50 Henderson, C. E., I isbursements 301 00 Hewlett, R. C. 287 50 Jean, Aug. 190 00 Jones, R. D. 295 00 Kingsford, M. R. 100 00 Knox, D. 292 50 Locke, W. D. 292 50 Sawyer, C. E. 167 50 Taylor, Chas. 260 00 Nepigon Reserve—\$8,568.17. 5 00 Bliss, L. E. 765 00 Disbursements 1,360 67 Bouchard, N. 240 00 Davies, E. L. 320 00 Dickson, H. A. 275 00 Donley, J. P. 312 50 Ferris, R. H.	Dean, T. B Doolittle, G. W. Doolittle, Rober Doyle, Gus Duval, C. A	t	835	00	202 50 250 00 320 00 285 00	
Foot, W. S. Gordon, R. Hall, J. E. Haskell, H. R. Henderson, C. E., I isbursements Hewlett, R. C. Jean, Aug. Jones, R. D. Kingsford, M. R. Knox, D. Locke, W. D. Sawyer, C. E. Taylor, Chas. Nepigon Reserve—\$8,568.17. Absolon, W. Blair, Bert Disbursements Bouchard, N. Davies, E. L. Donley, J. P. Ferris, R. H. Fraser, Grant Greenwood, John Heffernon, J. J. Garried downed 167 50 296 00 296 00 297 50 298 250 298 250 282 250 282 50 282 50 282 50 282 50 283 50 260 00 275 67 320 00 320 00 320 00 400 400 400 400 400 400 400	Edwards, H. S. Eveline, J Eveline, A Eveline, J. H. Featherstonhaug Ferguson, Julier	;h, М. Н.		• • • • • • • • • • • • • • • • • • • •	300 00 272 50 225 00 230 00 160 00 300 00	
Jones, R. D. Kingsford, M. R. Knox, D. Locke, W. D. Sawyer, C. E. Taylor, Chas. Nepigon Reserve—\$8,568.17. Absolon, W. Blair, Bert Bliss, L. E. Disbursements 1,360 67 Souchard, N. Davies, E. L. Davies, E. L. Donley, J. P. Ferris, R. H. Fraser, Grant Greenwood, John Hefferhon, J. J. Convict Advanced 295 00 100 295 00 100 292 50 200 200 200 200 200 200 200 200 200 2	Foot, W. S Gordon, R Hall, J. E Haskell, H. R. Henderson, C. F. Hewlett, R. C.	L, Lisbursements			265 00 290 00 167 50 302 50 301 00 287 50	
Absolon, W. Blair, Bert Bliss, L. E. Disbursements 1,360 67 Rouchard, N. Davies, E. L. Dickson, H. A. Donley, J. P. Ferris, R. H. Fraser, Grant Greenwood, John Harris, R. J. Convied downed 172 50 5 00 5 00 5 00 5 00 5 00 5 00 5 00	Jones, R. D Kingsford, M. R Knox, D Locke, W. D Sawyer, C. E.			• • • • •	295 00 100 00 292 50 282 50 167 50	
Blair, Bert 5 00 Bliss, L. E. 765 00 Disbursements 1,360 67 Bouchard, N. 2,125 67 Davies, E. L. 320 00 Dickson, H. A. 275 00 Donley, J. P. 312 50 Ferris, R. H. 332 50 Fraser, Grant 352 50 Greenwood, John 337 50 Harris, R. J. 320 00 Hefferhon, J. J. 360 00	Nepig	gon Reserve—\$8,568.17.				
Bouchard, N. 240 00 Davies, E. L. 320 00 Dickson, H. A. 275 00 Donley, J. P. 312 50 Ferris, R. H. 332 50 Fraser, Grant 352 50 Greenwood, John 337 50 Harris, R. J. 320 00 Hefferhon, J. J. 360 00	Blair, Bert Bliss, L. E	· · · · · · · · · · · · · · · · · · ·	765			
Carried forward	Davies, E. L Dickson, H. A. Donley, J. P Ferris, R. H Greenwood, Joh Harris, R. J	n			240 00 320 00 275 00 312 50 332 50 352 50 337 50 320 00	
	Carried	forward	• • • • • • •		72,237 00	275,380 24

Service.	\$	c.	\$	c.	\$	c.
Brought forward	_		72,237	00	275,380	2
Forest Reserves—Concluded						
Nepigon Reserve.—Concluded.						
Higgins, Robt. Husband, A. C. Judge, S. E. King, G. A. Linklater, Wm. McDowell, T. W. Michael, A. Rae, A. Scott, C. V. Thompson, A. R. Ward, James Young, N. M.			2 347 332 360 275 300 297 395 325 45 387 347	50 00 00 50 50 00 00 50		
Eastern Reserve—\$2,737.76.		:				
Bishop, Hugh Brown, George Egan, Wm. Gilmour, John Shultz, James Tapping, Thomas Disbursements	400	 ,	375 335 37 375 335	00 50 00		
Watkins, Robert Young, William Young, George			535 375 30 340	00 00		
Sibley Reserve—\$807.50.			-			
Cross, J. G. Cross, R. J. Oliver, J. A.			382 325 100	00	:	
Quetico Reserve.—\$4,407.95.						
Armstrong R. Berrye, C. W. Brecken, F. E. Darby, W. Gadd, C. H. Gibson, W. F. Gilfoil, G. Hampshire, F. N. Johnston, R. McDonald, D. Murray, O. J. Oglesten, R. Wall, S. L. Wall, George Watts, George. Disbursements			300 300 300 300 300 300 300 300 300 300	00 00 00 00 00 00 00 00 00 00 00 00	93 605	: 91
					83,605	2.

$Appendix\ No.\ 6.-\!\!-\!\!Continued.$

	1		1		
Service.	\$	e.	\$	c.	\$ c.
Brought forward					358,985 45
MINES AND MINING.			į		
Miller, G. W., Provincial Geologist services Disbursements	4,250 359		4 600	. 41	
Knight, C. W., 1st Assistant Geologist services Disbursements	2,100 479		4,609		
Burrows, A. G., 2nd Assistant Geologist services Disbursements	2,000 571		2,579		
Hopkins, P. E., 3rd Assistant Geologist services Disbursements	1,000 166		2,571		
Mickle, G. R., Mine Assessor, services	4,000 725		1,166		
Price, S., Mining Commissioner, services Disbursements	3,700 1,171		4,725		
Dance, R. W., Mining Commissioner's Clerk,	920	01	4,871	56	
Disbursements	458	48	1,378	49	
Corkill, E. T., Inspector of Mines, services Disbursements	2,400 976		3,376	30	
Sutherland, T. F., Assistant Inspector of Mines, services	2,200 1,356				
Rogers, W. R., Topographer, services Disbursements	1,700 506		3,556	30	
McArthur, T. A., Inspector of Recorders' Offices,			2,206	68	•
services	650 437		1,087	95	99 400 04
Explorations, Investigations and Inspections.					32,129 01
Coleman, Dr. A. P. Disbursements Freeman, D	329 23		399	04	
Greenland, C. W. Mahaffy, A. F. Parsons, A. L. Disbursements	471	15	352 268 76		
Scott, John	630	00	1,102	05	
Sharpe, Donald	$\frac{225}{700}$	00	825	50	
Smith, G. J. Smith, R. M. Disbursements	314 19	42	887 294		
			333	47	
Carried forward	• • • • • • • • • • • • • • • • • • • •	••••	4,539	41	391,114 46

$Appendix\ No.\ 6.-\!\!-\!\!Continued.$

Service.	\$ c.	\$ c.	- \$ c.
Brought forward		4,539 41	391,114 46
Explorations, Investigations and Inspections.— Concluded.			*
Stewart, R. B	617 30 173 59	700.00	-
Stewart, Wm. Express		790 89 55 00 3 80	5,389 10
MINING RECORDERS.			- 0,009 XV
Bowker, S. T., Recorder	986 16 319 12	1 205 20	
Bruce, A. E. D., Recorder Gauthier, G. H., Recorder Graham, F. W., Clerk Millard, C. S., Clerk O'Brien, J. D., Clerk	1,061 65 416 10 1,200 00 540 77 1,026 54	1,305 28	,
Clarke, W. K., Clerk Keenan, H. F., Clerk Glazier, M. B., Clerk Disbursements	258 27 273 46 636 92 813 75	6,227 46	-
Campbell, C. A. Recorder Gordon, T. C., Clerk Washburn, H., Clerk Glazier, M. B., Clerk Young, Miss E., Stenographer Disbursements	886 50 630 00 724 59 450 00 483 08 352 62		-
Hough, J. A., Recorder Browning, A. J., Clerk Disbursements	1,200 00 900 00 537 94	3,526 79	•
McQuire, H. F	500 00 159 30	2,637 94	_
Morgan, J. W., Recoruer	986 16 311 05	659 30	
Sheppard, H. E., Recorder	1,000 00 178 93	1,297 21	
Skill, Albert, Recorder	1,200 00 273 96	1,178 93	
Smith, G. T., Recorder Meagher, T. J., Clerk Sarsfield, J. M., Clerk Ferguson, L. H., Clerk Monroe, Miss E., Stenographer	2,300 00 900 00 1,100 00 717 50 720 00	1,473 96	
Smith, Miss M. H., Stenographer	480 00 660 00	6,877 50	-
Spry, W. L., Recorder		635 83 300 00	
Carried forward		26,120 20	396,503 56

$Appendix\ No.\ 6.--Continued.$

Service.	\$	c.	\$	с.	\$	с.
Brought forward			26,120	20	396,503	56
MINING RECORDERS.—Concluded.						
Dominion Express Company King's Printer Methodist Book Room Harcourt, E. H. Co., Rice, Lewis & Co.	31 147	74 99 88 29 65	1,176	55		
PROVINCIAL ASSAY OFFICE.					27,296	75
Turner, N. L	1,200 41	00 85				
Rothwell, T. E. Disbursements	1,060 133		1,241			
Supplies			1,193 1,180 154 634	$\frac{36}{12}$	4,404	26
CULLERS' ACT.					1,101	50
Currie, D. H., Services Henderson, Charles, Disbursements McDougall, J. T. Disbursements Margach, Wm., Disbursements Advertising		• • • • •	$\begin{smallmatrix}3\\21\\2\end{smallmatrix}$	00 00 00 50 80	37	30
SPECIAL SERVICES AND UNFORESEEN EXPENSES.						
Nicol, Wm., re Toronto Exhibition Disbursements	300 276		F70	00		
Orser, E. H., re Windsor Exhibition Disbursements		00 14	576 127			
Turner, N. L., Disbursements Disbursements re Toronto Exhibition	• • • • • • •	• • • •	100 462	00	1,265	98
Surveys					123,016	46
Board of Surveyors					200	00
EXPERIMENTAL TREATMENT OF ORE					428	50
REFUNDS					15,625	44
CONTINGENCIES.						
Departmental		1				
Printing and Binding	4,740 6,415		11 150	70		
Postage Express	1,814 295		11,156 2,110			
Carried forward4 L.M.	• • • • • • • •		13,266		568,778	 35

Appendix No. 6.—Concluded.

Service.	\$	c.	\$	c.	\$	c.
Brought forward			13,266	70	568,778	35
Contingencies.—Concluded.						
$Departmental\!$						
Celegraphing Gell Telephone Company Car Fare	90	36 30 0 00	624	66		
Subscriptions	$\frac{227}{4,802}$	75 2 14	021	00		
Maps Typewriters, rent and repairs Hearst, Hon. W. H., Travelling expenses Kirkpatrick, G. B., Travelling expenses	250	00 5 50	5,029 257 556	21		
Arthogather, G. B., Travelling expenses Rorke, L. V., Travelling expenses St. John, C. W. Travelling expenses White, Aubrey, Travelling expenses Whitson, J. F., Travelling expenses Stewart, A. M., Legal Fees	35 100 25 489 78	5 65 0 00 5 00 0 50 3 60 5 00				
Extra ClerksSundries	4,484		1,264 4,815			
BUREAU OF MINES.			1,020		25,815	5 29
Printing and Binding	$1,101 \\ 2,682$		3,783	03		
Postage Felegraphing Express and Cartage Advertising Subscriptions	$ \begin{array}{c c} & 257 \\ & 34 \\ & 1,32 \\ & 169 \\ \end{array} $	9 81				
Maps		3 10 7 30 4 45	4,355	56		
Typewriter repairs	29	9 80 1 85		. 75 .e=		2
Extra Clerks			1	65 01		
Legal Fees Nattress, Rev. Thos., Drawings for report Nicholas, F. J., Preparing Index Sundries	200 78	9 50 0 00 5 00 2 17				
			876	6 67	9,188	3 67
					603.782	_

D. GEO. ROSS, Accountant.

Appendix No. 7.

Statement of Expenses on account of various services under the direction of the Department of Lands, Forests and Mines for the year ending October 31st, 1912.

Service.	\$ c.	\$ c.	\$ c.
ALGONQUIN PARK	•••••		20,468 10
RONDEAU PARK	• • • • • • • • • • • • • • • • • • • •		4,003 29
VETERANS' COMMUTATION	• • • • • • • • • • • • • • • • • • • •		1,050 00
CLEARING AREA RE TOWNSITES			2,333 30
7 7. 7. 7.			10,000 00
NORTHERN DEVELOPMENT			
Whitson, J. F. Salary Bruce, A. E. D. do Robinson, W. J. do Lye, R. G. do Mahon, G. H. do Beardall, F. G. do Buchan, W. E. do Grey, F. B. do Ewing, S. B. do Smith, Miss I do Ryan, Miss H. do Bauldry, F. do Office Expenses	1,666 66 525 00 633 06 434 07 318 51 258 65 292 97 318 51 119 11 10 00 146 66 30 00 1,694 56	- 6,447 76	
Camp equipment, etc.	08,633 66 28,227 82 12,800 98 36,542 38 430 20	- 186,635 04	
BOUNTY ACT VII., EDWARD VII., CAP. 14	-	100,000 04	193,082 80
	••••••	1,432 20 1,164 60	2,596 80
		-	233,534 29

D. GEO. ROSS, Accountant.

Appendix No. 8.

WOODS AND FORESTS.

Statement of revenue collected during the year ending October 31st, 1912.

		\$ -	c.
Amount	of Western collections at Department	1,781,789	10
do	Belleville collections	27,610	
do	Ottawa collections	176,263	15
-		1,985,662	78

J. A. G. CROZIER, Chief Clerk in Charge. AUBREY WHITE, Deputy Minister.

Appendix No. 9.

PATENTS BRANCH.

Statement of Patents, etc., issued by the Patents Branch from 1st November, 1911, to 31st October, 1912.

Crown Lands	90
School do	2
Mining do	59
Public do (late Clergy Reserves)	10
Free Grant Lands (A. A.)	91
do (Act of 1880)	460
Mining Leases	378
Licenses of Occupation. Crown Leases	2.
Crown Leases	11
Crown Lands (University)	2
Mining do do	
	91
Rondeau Leases	4
Pine	2
Total	3,43

CHARLES S. JONES, * Chief Clerk.

AUBREY WHITE,
Deputy Minister.

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

	Area covered		Saw log	s.		
, Agencies.	by timber licenses.	Pi	ine.	Other.		
	Square miles.	Pieces.	Feet B.M.	Pieces.	Feet B.M.	
Western Timber District Belleville Timber	12,469 1	8,942,229	373,393,923	1,145,543	38,575,660	
District Ottawa Timber	610	336,003	9,400,281	195,898	6,340,333	
District	5,331 <u>1</u>	1,661,792	78,870,197	462,684	17,260,160	
	18,4103	10,940,024	461,664,401	1,804,125	62,176,153	

General Statement

Agencies.	Cord	wood.	ark.	ау :			· Si	e.ks.	700d.
	Hard.	Soft.	Tan Bark	Railway Ties.	Posts.	Poles.	Stave Bolts.	Shingle Blocks	Pulpwood
	Cords. Cords		Cords. Cords.		Cords.	Pieces. Cords.		Cords.	Cords.
Western Timber District Belleville Timber	43,822	44,376	5,920	5,703,774	481	13,617	2,093	66	130,345
District Ottawa Timber	. 205			30	<u>4</u> 5	70			17
District	24	1,986		655	171	1,680			9,976
	44,051	46,362	5,920	5,704,459	499	15,367	2,093	66	140,338

J. A. G. CROZIER, Chief Clerk in Charge

No. 10.

FORESTS.

Rent and Bonus during the year ending 31st October, 1912.

DESCRIPTION OF TIMBER.

	Boom and Dimension.				quare Ti	mber.	,	Piling.			
P	ine.	Other.		Pir	Pine. Oak and A		d Ash.	Tam- arac. Tamara		arac.	
Pieces.	Feet B.M.	Pieces.	Feet B.M.	Pieces.	Cubic feet.	Pieces Cubic feet.		Lineal feet.	Pieces	Ft.B.M.	
,	18,339,981	, i	4,883,489	,	,			112,256	1,887	250,724	
1,259 $22,230$,		685,584 1,377,622	1 1	32,727			}			
187,747	20,788,377	62,969	6,946,695	9,468	448,824	18	690	112,256	1,887	250,72	

of Timber.-Concluded.

Amounts accrued.

Tr ans- fer bonus.	Intere	st.	Tresp	ass.	Timber dues.		Bonus		Deposits timber sa 1912.		Ground rent.		Lorst	
\$ c 7,640 0	\$ 11,296	c. 08	\$ 6,47	c. 0 55	\$ 1,184,194	c. 36	\$ 485,926	c. 44	\$ 111,550	c. 83	\$ 64,567	c. 00	\$ 1,871,645	e. 26
720 0	92	71	12	9,25	19,824	24					4,780	00	25,546	20
380 0	575	97	61	5 37	142,675	40					26,622	18	170,868	92
8,740 0	0 11,964	76	7,21	5 17	1,346,694	00	485,926	44	111,550	83	95,969	18	2,068,060	38

AUBREY WHITE,
Deputy Minister.

Appendix No. 11.

Statement of the work done in the Military Branch of the Department of Lands, Forests and Mines, during the year 1912.

T 44		C 150
Letters received		
" written		5,900
Maps and reports supplied to veterans		
Printed forms issued		1,200
Locations made		139
Location certificates issued		14
Certificates surrendered		21
Certificates applied in payment of lands		53
References for patents issued		997

H. E. JOHNSTON,

Chief Clerk in Charge.

AUBREY WHITE,

Deputy Minister.

Appendix No. 12.

Statement of the number of Letters received and mailed by the Department in 1909-10, 1910-11 and 1911-12.

Year,		Letters received.						-	from
	Sales and Free Grants.	Surveys.	Woods and Forests.	Mines.	Totals.	Names indexed.	Orders-in-Council	Returned letters.	Letters, circulars and reports mailed from Department.
1909–10.	23,700	18,290	9,752	8.498	60,240	67,210	201	81	69,400
1910-11.	24,705	14,478	9,212	8,220	56,615	63,200	180	94	67,150
1911–12.	20,050	10,150	7,700	87,507	50,407	57,000	15 0	76	63,125

FRANK YEIGH,

Registrar,

AUBREY WHITE,

Deputy Minister.

Appendix No. 13.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties and of patents issued in Free Grant Townships during the year ending 31st October, 1912.

Township.	District or County.	Agent.		No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Brunel Cardwell Chaffey Draper Franklin Freeman Macaulay Medora Monck Morrison Muskoka McLean Oakley Ridout Ryde	Muskoka	J. B. Brown, Brae "" "" "" "" "" "" "" "" "" "" "" "" ""	ebridge " " " " " " " " " " " " " " " " " "	14 1 2 3 2 4 4 4 3 5 2 2 2 2 4 1 6 6	1,723 100 400 	2 	11 11 11 11 10 10 37 26 8 45	533 11 44 44 33 11 11 63 11 10	
Carling Christie Conger Comper Ferguson Foley Hagerman Harrison Humphrey McConkey McDougall McKellar McKenzie Monteith Shawanaga Wilson	11 11 11 11 11 11 11 11 11 11 11 11 11	F. R. Powell, Pari		4 8 10 4 4 1 3 4 5 4 5 1	695 898 1,394 586 697 100 336 578 702 571 653 97 200	1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 12 40 25 111 128 18 6 37	5 5 5 1 2 1 2 1 	2 18 4 16 13 3 4 46 5 2 3 1 3 3 20 1
Croft	Parry Sound .	Dr. J. S. Freeborn	n, Magnet- awan " " " " " "	2 3 1 4 7 5	264 400 101 578 1,064 800	 2 1 1 1	101 29 99 85	2 4 3 7 1	5 3 5 8 8 3

Appendix No. 13.—Continued.

Township. District Ounty. Agent. State Sta										
Spence	Township.	or	Ag	ent.	No. of persons located.	No. of acres located.	· - 5.	acres	No. of lots resumed.	No. of patents issued.
Strong " " " " " 1 130 " 1 1 100 " " " " " " " " " " " " " " " " " "	Ryerson	Parry Sound	Dr. J. S. Free			880			Q	6
Bethune		66		••	8	1,053		55	7 1	1
Joly		Parry Sound	W. Jenkin, En	asdale	7		1	100		8
McMurrich Perry	Bethune	"	"	66	2			101	3	
Perry	McMurrich		"	**				191		0
Hardy	Perry		l							
Himsworth	Proudfoot	**	"	"	1	182	• • •		• • • •	4
Himsworth	Hardy	Parry Sound	H. J. Ellis, Po	wassan			1			2
Martier	Himsworth	"	"	"			5	246		12
Patterson " " " " 2 300 1 7 7 2		1			3		12	717		
Boulter (pt)		**	"	"	2					
Boulter (pt)	Bonfield	Nipissing	W. J. Parsons	. North Bay	9	939			3	6
Chisholm " " " " 3 3 375 4 883 4 11 Ferris " " " " 24 2,382 2 7 14 15 Anson Haliburton R. H. Baker, Minden 2 200 1 1 1 1 1 1 Glamorgan " " " 389	Boulter (pt)	"	• •	"						
Anson Haliburton R. H. Baker, Minden 2 200 1 1 1 1 1 1 1 1 1	Chisholm	1					4	893		
Glamorgan	Ferris	••		•••	24	2,382	2	′	14	19
Hindon """"""""""""""""""""""""""""""""""""		Haliburton	R. H. Baker, M	linden	2		1	1		٠٠٠.
Lutterworth		"	"	"	7	989	• • •	•••••	6	5
Snowdon Stanhope Stanhope " " " " " " " " " " " " " " " " "		44	"		3	295	i	26	$\ddot{2}$	1
Stanhope " " " 1 105 1 56 1 3 Anstruther Burleigh, N.D. "S.D. Burleigh, N.D. "S.D. " " " " 1 105 1 56 1 3 Chandos " " " " 2 200 . 1 1 Methuen " " " 8 1,148 1 49 4 1 Cavendish Peterboro' " " 8 1,148 1 49 4 1 Galway Peterboro' " " 8 845 5 4 4 400 . 3 1 Galway Peterboro' " " 8 845 . 5 4 4 400 . 3 1 1 1 1513 . 7 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					1				2	3
Anstruther Peterboro'. William Hales, Apsley 6 500 6 1 Burleigh, N.D. " " "										1
Burleigh, N.D.	Stanhope	••		••	1	109	1	96	1	3
S.D. " " " 2 200		Peterboro'	William Hales	s, Apsley	6	. 500			6	
Chandos " " " 2 200 1 1 Methuen " " " " 1 1 Cardiff. Haliburton Beterboro' " 8 1,148 1 49 4 1 Galway Peterboro' " " 8 845 5 4 Monmouth Haliburton " " 11 1,513 7 3 Bangor Hastings W. J. Douglas, Greenview 4 500 1 10 2 Carlow " " " 1 100 .			".	"		• • • • • • • •	• • •	• • • • • • •	• • • •	1
Methuen " " " " " " " " " " " " " 3 1 1 148 1 49 4 1 1 1 148 1 49 4 1 1 1 1 4 49 4 1 1 1 4 49 4 1 1 1 4 49 4 1 1 1 1 1 1 49 4 1 1 1 1 1 4 49 4 1	D.D.		**	**	$ \cdot\cdot\cdot_2 $	200		• • • • • • •	i	1
Cavendish. Peterboro'. " " " 8 8 845 1 49 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		**	64	**			• • •		• • • •	• • • •
Cavendish. Peterboro'. " " " 8 8 845 1 49 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cardiff.	Haliburton	James Wilson	Kinmount	4	460			. 3	1
Monmouth Haliburton " " " 11 1,513 7 3 Bangor Hastings W. J. Douglas, Greenview 4 500 1 10 2 Carlow " " 1 100 Cashel " " " 1 4497 1 3 1 2 Dungannon " " " 7 857 1 52 1 5 Herschel " " " 88 832 8 2 Limerick " " " 3 500 2 1 Mayo " " " 3 500 2 1 Moclure " " " 5 697 1 1 2 2 Wicklow " " " " 1 105 2 9½ Wicklow " " " " 1 111 1 1 17 1 2 Algona, S Renfrew Adam Prince, Wilno 1 100 4 4 Brougham " " " " " 1 100 4 2		Peterboro'	"	66			i	49	4	1
Bangor Hastings W. J. Douglas, Greenview			l.					• • • • • •	5	
Carlow " " " 1 100	Monmouth	Haliburton	••			1,513	• • •	• • • • • • •	'	5
Cashel " " " 1 497 1 3 1 2 Faraday " " " 7 857 1 52 1 5 Herschel " " " 8 832 8 2 Limerick " " " 3 500 2 1 Mayo " " " 1 4 Moclure " " " 1 105 2 9½ Wicklow " " " 1 105 2 9½ Wollaston " " " 1 111 1 17 1 2 Algona, S. Renfrew Adam Prince, Wilno 1 100 4 Brougham " " 1 100 2		Hastings	W. J. Douglas,	Greenview			1	10	2	• • • •
Dungannon " " " 497 1 3 1 2 Faraday " " " 7 857 1 52 1 5 Herschel " " " 8 832 8 2 Limerick " " " 3 500 2 1 Mayo " " " 5 697 1 1 2 McClure " " " 1 105 2 9½ Wicklow " " " 5 825 1 10 Wollaston " " " 1 1111 1 17 1 2 Algona, S. Renfrew Adam Prince, Wilno 1 100 4 Brougham " " 1 100 2		"	"	"	1	100	• • •	• • • • • • •	• • • •	• • • •
Monteagle " " 5 697 1 1 2 McClure " " 1 105 2 9½ Wicklow " " 5 825 1 10 Wollaston " " " 1 111 1 17 1 2 Algona, S Renfrew Adam Prince, Wilno 1 100 4 Brougham " " " 1 100 2		**	"	44	4	497	i i	3	i	2
Monteagle " " 5 697 1 1 2 McClure " " 1 105 2 9½ Wicklow " " 5 825 1 10 Wollaston " " " 1 111 1 17 1 2 Algona, S Renfrew Adam Prince, Wilno 1 100 4 Brougham " " " 1 100 2	Faraday)		7	857	1	52		5
Monteagle " " 5 697 1 1 2 McClure " " 1 105 2 9½ Wicklow " " 5 825 1 10 Wollaston " " " 1 111 1 17 1 2 Algona, S Renfrew Adam Prince, Wilno 1 100 4 Brougham " " " 1 100 2	Herschel						i	• • • • • •		2
Monteagle " " 5 697 1 1 2 McClure " " 1 105 2 9½ Wicklow " " 5 825 1 10 Wollaston " " " 1 111 1 17 1 2 Algona, S Renfrew Adam Prince, Wilno 1 100 4 Brougham " " " 1 100 2	Mayo	i .			1 -1	900				4
Wicklow " " " 5 825 1 10 Wollaston " " " 1 1111 1 17 1 2 Algona, S. Renfrew Adam Prince, Wilno 1 100 4 Brougham " " 1 100 2	Monteagle				5	697		1		$\tilde{2}$
Wollaston " " 1 111 1 17 1 2 Algona, S Renfrew Adam Prince, Wilno 1 100 4 Brougham " " 1 100 2	TT7 1 1						2		• • • •	• • • •
Algona, S Renfrew Adam Prince, Wilno	Wollaston								···i	2
Brougham " " 1 100 2		D. C		TT7:1						
Brudenell " " " 1 3 400 3			Adam Prince,	wilno			•••			
		64		**	1 3	400	J		3	

Appendix No. 13.—Continued.

Township.	District or County.	Agen	t.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Burns	Renfrew	Adam Prince, W	ilno	5 5	686	3	21	5 2	
Grattan	66	"	•	Э	634	1 9	21	4	′
Hagarty	"			5	812			3	1
Jones	44		•	$\overset{\circ}{2}$	337	j	32	3	2
Lyell	Nipissing		•	2 5	695	2		4	
Lyndoch	Renfrew		•	4	502			1	3
Matawatchan.	**			1	97	1	2		3 3 5
Radcliffe	**	" "	•	6	756	1	2	2	5
Raglan		44		5	471			3	
Richards						• • •			1
Sebastopol	44		•	2 7	237		99	$\begin{vmatrix} 1 \\ 6 \end{vmatrix}$	1 4
Sherwood				'	937	1	99	0	4
Algona, N	Renfrew	D. B. Warren, P.	embroke	4	311			9	
Alice	"	" " "	"	$\overset{\bullet}{2}$	136			1	
Buchanan (pt)	46	66	66	$\bar{2}$	281	i	62	3	1
Fraser	"	66	"						2
Head	66	"	66						1
Maria	44	"	44						
McKay (pt)	66	44	"					1	
Petawawa	**		"	2	200	3	6	2	2
Rolph			"	1	100	1	13	• • • •	1
Wilberforce Wylie (pt)	44		64	$\frac{\cdots}{2}$	241	• • •			2
wyne (pt)				_	241		• • • • • •	-	
Calvin	Nipissing	Robert Small, M	attawa.	3	283			1	2
Cameron (pt).	"	"	66	$\tilde{2}$	176				
Lauder	46	41	44						
Mattawan	**	**	66	5	631	3	4	1	
Papineau	"	44	**	9	997	1	8	7	3
T7 1	4.3	F11 1137 11 0	14.04 14		0.0				
Korah	Algoma	Edw'd Noble, Sau	ut Ste. Marie	1	80	•••		1	
Parke Prince	44	46	"		799	1	151 17	1 6	6 3
I Tince				5	732	1	17	0	9
Aberdeen	Algoma	Thos. Buchanan	Thessalon	2	$240\frac{1}{2}$	1	3		7
" add.	## ## ## ## ## ## ## ## ## ## ## ## ##	"	" " " " " " " " " " " " " " " " " " "		2402				l
Galbraith	44	44	44	2	3171	1	13		10
Lefroy	"	"	44						1
Plummer	46	11	"						
" add.	**	"	**						
St Joseph Je'd	Algoma	W. E. Whybourne	Markeville	12	1 989			11	1
or soseph is a	Algoma	W.E. Whybourne	, marksville	12	1,282		·····	11	1
Baldwin (pt.). Merritt	Algoma	Neil Mulvaney,	Espanola	18 9	$\frac{2,558}{1,058}$	4	255	1	$\frac{2}{6}$
Blake	Thunder Roy	W. A. Burrows,	Port Anthus	14	2 071			8	19
Conmee	Induct Day.	" A. Duriows,	TOTE ATURE	$\frac{14}{23}$	2,074 $3,733$	ii	719	20	13 15
Crooks	66	**	44	$\frac{23}{24}$	$\frac{3,755}{3,552}$	1	30	9	19
Dawson Road.	**	66	66	49	5,302 $5,108$	10		35	
Dorion	**	**	"	10	1,511	1	66	6	
Gillies	"	66	46	11	1,560	3	353	1	8
Gorham	"	**	"	78	11,904	19	2,321	44	12
Lybster	**	**	"	8	1,085	7	198	7	5
Marks	**	"	"	12	1,918	7	487	9	11
	Ī	l	J	l (1	l	ŧ	l

Appendix No. 13.—Continued.

Township, District or County. Agent. Section S			F F ********************************				•				
McIntyre " " " " " 16 2,489 7 350 14 9 01 14 9 01 10 10 10 10 10 10 10 10 10 10 10 10	Township.	or	Age	nt.		No. of persons located.	No. of acres located.	Jo	of acres	No. of lots resumed.	No. of patents issued.
O'Conor	McGregor	Thunder Bay.	W. A. Burrows	, Port Art	hur						
Oliver " " " " 16 2,572½ 12 662 16 10 10 Paipoonge,NR " " " " " " 8 73 1 100 9 5 8 Pearson. " " " " 15 2,315½ 2 14 9 9 8 Pearson. " " " " 15 2,315½ 2 14 9 9 7 8 8 Pearson. " " " " 27 3,88½ 28 555 13 22 Strange. " " " 24 3,716½ 13 1,264 13 5 Ware " 80 12,454 17 885 28 9 4 20 4 13 5 9 12 4 19 9 12 16 Curran. " " 4 644 2 42 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	McIntyre		"	11							
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Pardee. " " " 15 2,315½ 2 14 9 7 7 Scoble. " " " 27 3,898½ 23 555 13 22 Strange. " " " 27 3,898½ 23 555 13 22 Strange. " " " 80 12,454 17 885 28 9 Atwood. Rainy River. William Cameron, Stratton. 1 161 2 2 1 140 13 Dilke. " " 14 1,888 10 299 12 16 Curran. " " 4 644 2 42 5 1 1 3 Dewart 1 40 1 3 Dilke. " " 15 2,189 5 167 13 3 Morson. " " 15 2,189 5 167 13 3 Morson. " " 26 3,956 17 780 20 McCroson. " " 8 1,119 10 458 10 4 Nelles. " " 16 2,239 4 20 21 1 Norley. " " 16 2,239 4 20 21 1 Norley. " " 16 2,259 4 20 21 1 Norley. " " 16 2,259 4 20 21 1 Norley. " " 16 2,259 4 20 21 1 Norley. " " 16 2,259 4 20 21 1 Norley. " " 16 2,259 4 20 21 1 Norley. " " 16 2,259 4 20 21 1 Norley. " " 17 Norley. " " 18 3,119 10 458 10 4 Norley. " " 16 2,259 4 20 21 2 A Norley. " " 17 Norley. " " 18 3,119 10 458 10 4 Norley. " " 16 2,259 4 20 21 2 A Norley. " " 17 Norley. " " 18 3,119 10 458 10 4 Norley. " " 18 3,119 10 458 10 4 Norley. " " 18 3,119 10 458 10 4 Norley. " " 18 3,119 10 458 10 4 Norley. " " 18 3,119 10 458 10 4 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " " 18 Norley. " 18 Norley. " 18 Norley. " " 18 Norley. " 18 Norl	Paipoonge, NR	1	"	**	1						8
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Ware " " " 80 12,454 17 885 28 9 Atwood Rainy River William Cameron, Stratton 1 161 2.99 12 16 Curran " " " 4 1888 10 299 12 16 Dewart " " " 1 162 2 3 1 1 Morson " " " 15 2,189 5 167 13 3 McCrosson " " " 16 2,432 5 128 10 4 Nelless " " " 16 2,432 5 128 11 19 10 488 10 4 Pattullo " " " " 16 2,432 5 128 11 19 10 488 11 19 10 48 12 14	Strange	**	"	44							5
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Appendix No. 13.—Concluded.

		11						
Township.	District or County.	Agent.	No. of persons located.	No of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Van Horne Wabigoon Wainwright Zealand		R. H. Pronger, Dryden	3 20 9 18	314 2,914 1,217 2,219	 5 	345 229	$\begin{vmatrix} 4 \\ 10 \\ 11 \\ 6 \end{vmatrix}$	····i
Melick Pellatt	Kenora	W. L. Spry, Kenora	17 16	2,462 2,111	3	70 127	10 10	
Blezard Capreol Hanmer Lumsden		J. A. Lemieux, Blezard "Valley "" "	3 7 7 9	$^{480}_{1,071}_{964}_{964}$	1 6 1 1	$2\frac{3}{4}$	11 3 2	11
Balfour	46	J. K. MacLennan, Sudbury "	12 16	$1,705 \\ 2,213$	$\begin{vmatrix} 1\\2 \end{vmatrix}$		6	
Chapleau Dill. Garson. Morgan (pt) Neelon Rayside	Sudbury	" " " " " " " " " " " " " " " " " " "	5 5 4 9 2	647 827 475 1,195 171	4 1 8 1	$\frac{4\frac{1}{2}}{1,228}$	1 1	
Appleby Casimir Dunnet Hagar Jennings Kirkpatrick Ratter	" " Nipissing	Emile Langlois, Warren	4 3 7 2 8 10 7	572 479 929 <u>3</u> 317 <u>1</u> 1,214 1,475 1,076		$ \begin{array}{c c} 4 \\ 1\frac{1}{2} \\ 49\frac{1}{2} \\ & 171\frac{1}{2} \end{array} $	$\frac{1}{2}$	
Grant Macpherson Martland	Sudbury Nipissing	J A. Philion, Sturgeon Falls. """" """" """""	9 9 7 6 9 4	$1,194\frac{1}{2}$ $1,299$ $1,061$ 874 $1,470\frac{1}{2}$ 490	3	164	1	11 1 2 8
Abinger Canonto, S " N Clarendon Denbigh	Addington Frontenac " " Lennox and	Charles Both, Denbigh	2 1 3	251			2	1
Miller (pt.) Palmerston (pt.)	Addington Frontenac	44 44 44 44	1	204 100			$\begin{vmatrix} 2\\1\\1 \end{vmatrix}$	
AiryFinlayson Murchison Sabine	Nipissing	Unattached	$ \begin{array}{c c} 2 \\ 1 \\ 2 \\ 8 \\ \hline 1675 \end{array} $	298 133 301 950 237,152	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i	3	1 2

W. C. CAIN, Clerk in Charge.

AUBREY WHITE,
Deputy Minister.

Appendix No. 14.

Statement of Municipal Surveys for which instructions issued during the 12 months, ending October 31st, 1912.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.
1	F. M. Eagleson	683a	Nov. 1st, 1911	To survey the road allowance between the 7th and 8th concessions of the township of Williamsburgh, from the east limit of lot 25, or the nearest undisputed monument, to the west limit of the township, and to define the limits of said road allowance by permanent monuments on each side thereof.
2	S. B. Code	684	Feb. 2nd, 1912	To survey the road allowance between the 6th and 7th concessions of the township of Marlborough, in the county of Carleton, opposite lots 1, 2, 3 and 4, or as much farther as may be necessary to find an original monument, and to define by permanent stone or other monuments the limits of said road allowance.
3	T. J. Patten	685	July 11th, 1912	To survey the rear boundary of lots 24, 25, 26, 27, 28, 29, 30, 31, 32 and 33, of concession No. 2, in the township of Assiginack, being the road allowance in rear of the lots fronting on the road to Michael's Bay, and have the same defined by permanent monuments on each side of said road allowance, and also the front of lots Nos. 20, 21 and 22 on the 6th and 7th concession road allowance and to have the corners of said lots defined by permanent monuments.
4	E. T. Wilkie	686	Sept. 27th, 1912.	To survey the line between concessions 7 and 8 from lots 9 to 13 in the township of Hinchin-brooke, or as much farther on each side as an original post can be found.

GEORGE B. KIRKPATRICK,
Director of Surveys.

Appendix No. 15.

Statement of Municipal Surveys confirmed during the 12 months ending October 31st, 1912.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.	Date when confirmed under R.S.O., 1897, Chap. 181, secs. 10– 15 inclusive.
	William H. Fairchild. W. J. Moore			To survey the road allowance between the 3rd and 4th concessions of the township of East Oxford, in the county of Oxford, across lots Nos. 16 to 18, inclusive, or as much farther on either side as may be necessary to find an original monument, and to mark the road allowance across lots Nos. 16 to 18, inclusive, with permanent monuments on each side of said road allowance. To survey the original road allowance between the 6th and 7th concessions of the township of Elmsley North, in the county of Lanark, from Lot 22 to Lot 30, inclusive, or between such points in which an original or undisputed point can be found and to define said road allowance by permanent stone or iron monuments on each side thereof, in accordance with the provisions of the Revised Statutes of Ontario, 1897, Chapter 181, Section 14.	, , , , , , , , , , , , , , , , , , ,

GEORGE B. KIRKPATRICK,
Director of Surveys.

Appendix No. 16.

Statement of Crown Surveys in progress during the twelve months ending October 31st, 1912.

_	1	l .		
No.	Date of Instructions.	Name of Surveyor.	. Description of Survey.	Amount Paid.
11 22 3 4 4 5 5 6 6 7 7 8 9 100 111 12 13 14 15 16 17 18 19 20 21	May 4, 1911. May 14, 1912. May 20, 1912. May 20, 1912. May 21, 1912. May 21, 1912. May 21, 1912. May 27, 1912. July 9, 1912. July 10, 1912. July 17, 1912. July 13, 1912. July 13, 1912. July 17, 1912. July 17, 1912. July 17, 1912. July 17, 1912. July 17, 1912. July 17, 1912. July 17, 1912. July 17, 1912. July 17, 1912. July 17, 1912. July 12, 1912. July 12, 1912. Oct. 10, 1912.	Lang & Ross Speight & Van Nostrand	Algoma Survey of part of the township of Hanlan, District of Algoma Survey of township outlines, District of Algoma Survey of Dawson Road Lots, District of Thunder Bay Survey of township outlines, District of Algoma, and township of Studholm, District of Algoma Survey of part of township of Mattawan, District of Nipissing Survey of part of township of Casgrain, District of Algoma	\$ c. 1,600 00 5,000 00 8,500 00 4,500 00 4,500 00 4,500 00 4,500 00 4,800 00 4,800 00 4,800 00 4,500 00 1,800 00 4,500 00 2,100 00 4,500 00 2,000 00 2,800 00 1,500 00
_			1	75,500 00

GEORGE B. KIRKPATRICK,
Director of Surveys.

Appendix No. 17.

Statement of Crown Lands surveyed, completed and closed during the 12 months, ending October 31st, 1912.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of acres.
				\$ c.	1
1	May 29, 1911	A. Bell	To survey outlines of new town- ships, District of Nipissing	204 02	
2	June 10, 1911	D. Beatty	To survey islands in Georgian Bay, in front of Conger and Cowper		
3	July 25, 1911 & June 20, 1911.	E. D. Bolton	To survey tract of land near Mack Station, District of Thunder Bay, and survey of township of Lyon, additional	263 72	0
4	May 2, 1911	H. J. Beatty	To survey township outlines, Dis-	656 23	
5	June 20, 1911	Code & Code	trict of Sudbury	283 30	
6	May 4, 1911	J. S. Dobie	trict of Sudbury	246 10	
7	May 17, 1911	C. H. Fullerton	trict of Sudbury	293 2	8
8	June 8, 1911	J. W. Fitzgerald.	To survey township outlines, Dis-	276 80	
9	July 18, 1911	T. D. Green	trict of Sudbury	249 7	
10	June 17, 1911	D. J. Gillon	of Kenora	378 4	1
1	July 31, 1911	A. D. Griffin	District of Rainy River To traverse Sesekinika Lake, Dis-	508 3	
2	June 12, 1911	Jas. Hutcheon	District of Sudbury and Town-	309 93	
13	July 21, 1911	J. E. Jackson	ship of Machin		53,812
14	June 28, 1911	Paulin & Anderson	District of Nipissing To survey Zealand additional, and townsite in Wabigoon township, District of Kenora	241 28	
15	June 28, 1911	Sutcliffe & Neelands	To traverse the Mattagami River,	2 700 20	,
16	June 2, 1911	J. J. Newman	District of Sudbury	2,509 20	
17	May 20, 1911		trict of Nipissing	1,164 32	
8	June 8, 1911	Walter Smith	District of Sudbury To traverse lakes and rivers, lying between Bisco Station and Mat-	1,517 50	
9	Sept. 10, 1911	D. J. Gillon		195 08	
20	May 23, 1912	E. H. Low	Quetico Forest Reserve Survey of township outlines, Dis-	518 50	
1	May 28, 1912	Jas. S. Dobie	trict of Sudbury	5,153 30	
22		W. Smith	District of Algoma Survey of township outlines, Dis-	5,242 20	1
3	June 18, 1912	Code & Code	trict of Sudbury Survey of outlines District of Sud-	4,633 80	
24	June 21, 1912	Code & Code	bury	2,234 10	
25		A. D. Griffin	ing and Nipissing	595 80 5,188 60	

Appendix No. 17.—Continued.

Statement of Crown Lands surveyed, completed and closed during the 12 months.—Continued.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amou paid		No. of acres.
26 27 28 29 30	June 19, 1912 June 26, 1912 Oct. 10, 1912 June 21, 1912 June 8, 1912	David Beatty Sutcliffe & Neelands C. H. Fullerton Code & Code W. J. Moore W. Smith C. Tarling & Comerce	Survey of township of Fauquier, District of Algoma, and survey of part townships of Wallbridge and Mowat Survey of township outlines, Dis- trict of Algoma Survey of timber berths in Mulli- gan, District of Nipissing Survey of township outlines, Dis- trict of Temiskaming Survey of land at Armstrong Di- visional point Survey of timber berth No. 9, Dis- trict of Temiskaming Mounting maps Lithographing maps	\$ 2,561 5,192 687 1,684 178 649 316	c. 87 37 93 38 95 45 59	34,861
		E. R. Watts & Sons Maurice Derourard	Iron posts	190 46 519 47,516	00	

GEORGE B. KIRKPATRICK,
Director of Surveys.

Appendix No. 18.

SURVEY OF LINE BETWEEN THE DISTRICTS OF TIMISKAMING AND NIPISSING, FROM THE SOUTH ANGLE OF THE TOWNSHIP OF CASSELS EAST TO LAKE TIMISKAMING.

COBALT, Ont., October 17th, 1912.

SIR,—In accordance with instructions from your Department, bearing date June 21st, 1912, I have the honour to submit the following report on the survey of a Base Line forming a portion of the boundary between the District of Nipissing and the District of Timiskaming.

The survey was commenced at an iron post, marked "Riddell," on the southwest side, and "Cassels" on the north-west side. This post was found in the meridian line, run by O.L.S. Niven in 1885, which forms the east boundary of the townships of Cassels and Riddell. From this point, the line was run due east astronomically a distance of 9 miles 74 chains and 39 links to the waters of Lake Timiskaming. On the line wooden posts were planted every half-mile, and marked on the west side with the number of miles or half-miles distant from the starting place. The mile posts were also marked "Timiskaming" on the north side, and "Nipissing" on the south side. Iron posts were planted at the end of the fourth and eighth miles, and marked similarly to the wooden posts. As there was a perpendicular drop of some 100 feet at the point where outline joined the waters of Lake Timiskaming, it was impossible to plant iron posts at the high water mark as instructed by you. However, they were planted as near the face of the cliff as possible, and were well mounted with boulders. They were marked "Timiskaming" on the north side, "Nipissing" on the south side, and "IX. M & 74 chains, 23 links" on the west side.

TIMBER.

At Mileage IV. M. & 48 chains, 47 links the line crossed the eastern limit of the Timagami Forest Reserve. To the west of this line is a virgin forest of white and red pine with a considerable amount of valuable spruce and jack pine. There is also balsam and birch in smaller quantities. East of the reserve line all the pine has been cut. There is left a dense growth of spruce averaging about 8 inches, as well as some cedar, birch, and jack pine. The timber around Macdonald Lake was destroyed by fire about three years ago.

WATERS.

The main waters of the section are Rabbit Lake, Macdonald Lake, and the Matabitchouan River. On Rabbit Lake large storage dams have been constructed by the British Canadian Power Company. These have flooded the surrounding country, but have done very little damage, as the shores of the lake are steep and rocky. There is a convenient canoe route from Rabbit Lake to Macdonald Lake.

PHYSICAL FEATURES.

The greater portion of the country is rocky and very rough. The surface soil is scanty. The hills surrounding Lake Timiskaming are about 400 feet in height, and drop sharply towards the lake. At the Matabitchouan River there is also a very steep hill.

ROCKS AND MINERALS.

The rock formation is chiefly diabase and granite. Very little trace of economic mineral was found. In the vicinity of Macdonald Lake the country has been staked for mining purposes, and considerable work has been done, though at present no companies are operating.

GAME AND FISH.

Moose and red deer are quite plentiful in this district. The smaller animals have been trapped off to a great extent. There is, however, an abundance of fish. Rabbit Lake and the smaller lakes surrounding it are well stocked with pike, bass, and pickerel.

Observations for Azimuth were taken on Polaris throughout the work, and recorded in the field notes. The Magnetic Variation found was 9°30′ West.

Accompanying the report I beg to submit a plan on mounted paper, showing the topography of the line, and the waterways; a timber plan on tracing linen; a copy of the field notes, and index for same.

All of which are respectfully submitted.

I have the honour to be
Sir,
Your obedient servant,
(Signed) R. S. Code,
Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont

Appendix No. 19.

SURVEY OF TOWNSHIP OUTLINES, DISTRICTS OF ALGOMA AND SUDBURY.

OTTAWA, September 7th, 1912.

SIR,—I have the honour to submit the following report on the survey of certain township outlines in the Districts of Algoma and Sudbury, lying between the Ground Hog River and the Kapuskasing River, performed under instructions dated May 21st, 1912.

In pursuance of instructions I commenced my survey at the 18th mile post of O.L.S. T. B. Speight's base line run in 1909 near the crossing of the Canadian Northern Railway (under construction) over the Ground Hog River. From this point I ran north astronomically a distance of 9 miles, planting posts at the end of each 120 chains, excepting that as the third mile came in Gervais Lake, I planted a post on either shore with the chainage marked thereon.

From the nine mile post I ran west astronomically to intersect the meridian run north from the 9th mile post of O.L.S. Speight's base line aforesaid, which meridian I produced northward to intersect O.L.S. A. Niven's base line run in 1899 from the 120 mile post of the boundary between Nipissing and Sudbury Districts near the 61st mile post.

I then produced my before-mentioned base line west astronomically to intersection with O.L.S. Speight's meridian line run in 1909 near the 57th mile post thereof; thence west astronomically 9 miles, planting posts in accordance with instructions at the end of each 1½ miles, excepting that as the end of the sixth mile came in Mishiongo Lake, I planted a cedar post on the eastern shore of the west bay; thence due north to intersect O.L.S. Niven's base line near the 79th mile post thereof.

Again, commencing at the 81st mile post of O.L.S. Niven's base line aforesaid I ran north a distance of 18 miles and 78 links to intersection with O.L.S. Speight's base line run in 1909.

Finally, I ran due east astronomically from the intersection of O.L.S. Beatty's base line run this year, with the meridian mentioned in the next preceding clause near the 9th mile thereof, to intersect O.L.S. Speight's meridian line run in 1909, due north from the 72nd mile post of O.L.S. Niven's base line run in 1899.

The above mentioned lines were well cut out and the adjacent trees blazed on three sides in the customary manner, and especially well blazed where lines intersected navigable streams or lakes. Hewn wooden posts were planted as shown in the notes, and, except where available timber was too small, were six inches square when so hewn. Care was taken to plant posts as firmly as possible. Where possible a mound of stones was erected about the base of the posts. When the end of the mile and a half came in a lake or river the post was planted at the nearest shore with the chainage in miles, chains, and links carved thereon.

Iron posts were planted alongside the wooden posts (1) at the end of the first nine miles run, (2) at the intersection with the second meridian run, and (3) at the intersection of the second meridian with O.L.S. Niven's base line near the 61st mile post, (4) at the intersection of the 1st base line run with O.L.S. Speight's meridian near the 57th mile post, (5) at the end of the 9th mile west from Speight's base line, (6) at the intersection of the third meridian line with O.L.S. Niven's base line near the 79th mile post, (7) at the intersection of O.L.S. H. J. Beatty's base line with the meridian run by me north from the 81st mile of Niven's base line, near the 9th mile post, and (8) at the intersection of O.L.S. Beatty's base line produced by me, with O.L.S. Speight's meridian north from the 72nd mile post of O.L.S. Niven's base line run in 1899.

At frequent intervals throughout the survey observations on Pelaris were taken for obtaining azimuth, and the magnetic declination, which varied between 5 degrees and 7 degrees west of north, was noted and entered in the field notes.

Throughout the survey the chainbearers were impressed with the importance of noting the nature of the soil where exposed, the kind and size of the timber passed through, etc., and also of the need of great care to obtain accuracy in their operations.

PHYSICAL FEATURES.

The district within the limits of the lines run by me is traversed diagonally by the new Sudbury-Port Arthur branch of the Canadian Northern Railway, and is for the most part rolling country, with numerous lakes, rivers, and creeks. The soil is light and gravelly in the eastern part of the district surveyed; but good agricultural clay land was met with in the western areas near the Kapuskasing River. Very little rock was met with and no evidence was seen of the presence of any economic minerals. A low hill of syenite was encountered on the first line run north from the 18 m.p. of O.LS.. Speight's base line, and again an exposure of granular quartzite was crossed west of the Piskanogama River.

TIMBER.

Considerable black and white spruce was seen and noted, as shewn in the notes, the most valuable tract from a commercial viewpoint being east of the Kapuskasing River and several miles north of the Canadian Northern Railway.

The timber for the most part, however, is small and faulty. Some scattering red and white pine groves were crossed and several large tracts of poplar suitable for pulp-wood.

It was noticed that the tamarac trees are beginning to put out green shoots, and a good deal of young green tamarac was seen in the level swamp land.

WATER POWER.

Nearly every stream crossed is available for power development, the most promising being the falls on the Kapuskasing, belown Kapuskasing Lake, and a series of long rapids on the Piskonogama, a few miles north from the crossing of the Canadian Northern Railway. There is also a splendid chute with a fall of about 30 feet on the Kapuskasing River, just north of the crossing of O.L.S. Speight's base line.

GAME.

Signs of moose were plentiful everywhere, but partridge and rabbit seemed scarce.

The waters and shores of some of the lakes and rivers abound with muskrat and beaver. A good many marten and fisher were seen and two red deer. Duck, geese and loon were fairly plentiful.

Accompanying this report are field notes, index plan, timber plan, general plan mounted on cotton, chain bearers oaths, account in triplicate.

I have the honour to be Sir, Your obedient servant, (Signed) J. W. PIERCE.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ontario.

Appendix No. 20.

SURVEY OF TOWNSHIP OUTLINES, DISTRICT OF SUDBURY.

SUDBURY, ONT., October 17th, 1912.

SIR,—I have the honour to report as follows on the survey of certain township outlines in the vicinity of Ground Hog Lake, along the line of the Canadian Northern Ontario Railway, in the District of Sudbury, performed under instructions from your Department, dated May 23rd, 1912.

On June 27th my packers left for Bisco, and the following morning proceeded up Bisco Lake and over the old canoe route to Flying Post. The remainder of the

party followed on July 3rd, overtaking the packers at Marion Lake, and all arrived at the O.L.S. Speight's Base Line, on the Ground Hog River, early on the morning of July 8th.

I started my survey at the 18th mile post on this base line, and ran my second meridian line south 18 miles to connect with O.L.S. Smith's survey, but Mr. Smith had not then reached that part of his work, so I blazed several chains ahead of the end of my line to enable him to find it without trouble.

From a post on O.L.S. Speight's base line on the west shore of Ground Hog River, marked 18 miles, 73.00 chains, my first base line was run 8 miles and 7.00 chains east and the north-east corner of township of Penhorwood established and the line continued east to the west boundary of Township of Pharand.

From the north-east corner of township of Penhorwood my third meridian line was run south 18 miles, and, as before, the blazing was continued beyond the end

of the line to enable him to find it quickly.

My second base line was begun at the 9th mile on my third meridian and run east to the west boundary of Township of Crothers and west to intersection with my second meridian line at the 9th mile, and continued west 9 miles farther.

From this last point my first meridian line was run 9 miles north to intersec-

tion with O.L.S. Speight's base line near his 9th mile post.

The iron posts provided by your Department were planted at the various township corners according to instructions and marked with the names of the adjacent townships, so far as they were known to me, and with the mileage.

Wooden posts of cedar, spruce or pine, six inches square or larger, were similarly marked and firmly planted beside the iron ones and both securely rocked up.

Wooden posts similar to the above and properly marked with the mileage were planted at every mile and a half on each line, and the position of every post was established with reference to two bearing trees.

All lines were well cleared to a good width, and particular attention was paid

to liberal blazing of the same.

The season was very wet and caused much discomfort, which was only partly counter-balanced by the complete absence of blackflies. Owing to the long continued spells of cloudy weather I was unable to take as many observations for azimuth as I wished. Those taken are shown in their proper places in the field notes, and the bearing of the line at each place noted.

The variation of the compass was found to be about 6°30' west of north.

GENERAL FEATURES.

The surface of the country included within the limits of this survey may be described as gently rolling, as only on the west line of Township of Hardiman and on the south line of Township of Keith were hills over thirty feet in height encountered, and none were precipitous, being for the most part sand ridges. Small lakes and small cedar swamps are very numerous. An area of old brulé, grown up with small poplar, spruce, and Banksian pine lies in a north and south direction across the township east of Penhorwood. The south-west corner of Township of Hardiman lies in a similar brulé, and the same was encountered on the south and west lines of Township of Keith.

Soil.

A small area of sandy loam in the north-west corner of Township of Penhorwood is suitable for farming, but for the most part the soil, as observed on the lines,

consists of very light sand, or sand and granite boulders with a very few rocky ridges. However, there are probably many small areas of good farm land in the interiors of the townships. Mr. McLeod, Hudson's Bay Factor at Flying Post, has been very successful in raising all kinds of vegetables, potatoes especially, in large quantities.

TIMBER.

The timber worthy of note consists of spruce, poplar, Banksian pine, birch, cedar, and balsam of splendid growth. Except for scattered specimens, the only white pine seen was in the south-west corner of Township of Penhorwood and southeast corner of Keith, east of the Ground Hog Lake. The pine here, which covers an area of about four square miles, is neither very large nor very plentiful. Some red pine, averaging about fifteen inches in diameter, was seen on the shores of the north-east arm of Matagaming Lake.

Rock.

On the west line of Township of Penhorwood greenstone schist was seen. On the south line of Township of Keith the line crossed a small ridge of porphyry, and a couple of outcroppings of quartz were noticed. The remainder of the rock seen was all granite.

WATER POWERS.

No water powers of commercial value are known to exist within the limits of this survey.

GAME.

Mink, marten, and bears were seen, the latter being very plentiful, as are moose and beaver. No signs of red deer were seen, and partridges were scarce, owing, no doubt, to the cold wet weather during the time of hatching and later. The Indians report fur-bearing animals in general to be plentiful.

Accompanying this report are the field notes, oaths of chainmen, map on scale of one mile to an inch, timber plan on linen and my account in triplicate, all of

which are respectfully submitted.

I have the honour to be, Sir, Your obedient servant, (Signed) E. H. Low, Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 21.

SURVEY OF TOWNSHIP LINES, DISTRICT OF SUDBURY.

SUDBURY, ONT., October 31st, 1912.

SIR,—I beg to submit the following report on the survey of the township outlines, in the District of Sudbury, along the line of the Canadian Northern Railway, performed under your instructions dated June 25th, 1912.

I arrived with my party at the north-west corner of the township of Togo on July 18th, and was fortunate enough to get an observation for azimuth, using the west boundary of the township of Mattagami as reference line for same. I began my first base line the following morning and continued it west to the Macaming River, after which I returned to the posts left at 6 miles and 30 chains west of the place of beginning, and ran my first meridian north between the townships of Stetham and Carter to the intersection thereof with the south boundary of the township of Hazen. I then ran south between the townships of Jack and Noble to the north bank of Minniesinaqua Lake, and returned to the base line at Macaming River and continued west to a point distant 6 miles and 6.29 chains from my first meridian. I ran the second meridian south along the west boundary of Jack from this point 6 miles. From this second meridian I continued west along the south boundary of Whalen 6 miles, and returning to the said meridian ran it north to the intersection thereof with the south boundary of the township of Middleboro produced to a point 27 links west of its south-west angle. I then ran west along my second base line between the townships of Wigle and Whalen, 6 miles, and thence south along the west boundary of Whalen to the south-west angle thereof. Returning to the north-west angle of Whalen, I produced my third meridian north along the west boundary of Wigle to a point near the intersection with my third base line. I then located the post planted at the north-west angle of the township of Middleboro by H. J. Beatty, O.L.S., and ran my third base line west to the intersection thereof with the west boundary of Wigle, continuing it west to the southwest angle of the township of Hardiman. At the intersection with the west boundary of Regan I moved the post planted by E. H. Low, O.L.S., 1.40 chains south to my line, and at the west boundary of Hardiman I moved his post 1.47 chains south to my line, and by so doing completed the above survey.

Wooden posts were planted at half-mile intervals on the different lines, together with one of the iron posts supplied by your Department at each of the township corners, all of which have been marked and referenced by bearing trees, as shown in the accompanying field notes. Where it was possible to do so cairns of stones were built around the posts, and, with the exception of that at the southeast corner of Jack, at Minniesinaqua Lake, the different township corners have

been so protected.

The country generally is composed mostly of rolling sandy loam and clay with loose boulders and stony. In different places, as shown in the field notes, high rocky hills were met with, and numerous swamps and small lakes were crossed.

The timber is mostly Jack pine, spruce, birch, balsam, and poplar with underbrush. Brulé and windfall lie along the lines in different places as shown in field notes. Some white pine was seen on the following lines. *i.e.*, between Carter and Jack, II. M. to III. M. South boundary of Whalen I. M. to IV. M. West boundary of Jack I. M. to II. M. West boundary of Wigle, II M. to IV. M.

The rock is of a granite formation, except a diorite outcrop near the southwest corner of Hardiman. No minerals were discovered or mining claims found.

Moose, partridge and beaver are plentiful, and the lakes are well stocked with

pike and pickerel.

Accompanying this report is a plan of survey, timber plan, field notes, and oaths of chainmen.

I have the honour to be,
Sir,
Your obedient servant,
(Signed) WALTER SMITH,
Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 22.

SURVEY OF OUTLINES OF TOWNSHIPS WEST OF LAKE TIMAGAMI AND LADY EVELYN LAKE, DISTRICT OF SUDBURY.

COBALT, ONT., October 17th, 1912.

SIR,—I beg to report that in accordance with instructions received from your Department and dated June 18th, 1912, I have surveyed the Third and Fourth Meridian lines, and First Base line, being north of the townships of Marconi, Turner and Seagram, and south of the townships of Corley, Gamble and McGiffin, in the Timagami Forest Reserve, in the District of Sudbury.

From a post marked "VI Miles" on the east, "Selby" on the north-east, "Dundee" on the south-west, and "Parker" on the north-west, "Acadia" on the south-east, on the line between the townships of Selby and Acadia, run by J. J. Newman, O.L.S., in 1911, I ran the Third Meridian due north astronomically 5 miles, and 74.69 chains, and intersected the south boundary of the township of Gamble at a point due west astronomically 10.85 chains from an iron and spruce post defining the south-east angle of the said township of Gamble and the southwest angle of the township of McGiffin. I then returned to the said point of commencement and ran said Third Meridian due south astronomically 6 miles and 6.50 chains, and intersected the north boundary of the township of Seagram in a lake at a point due west astronomically 29.70 chains from the post planted on the east shore of said lake, and marked V.M.—4.93. From a six-inch red pine post planted on the easterly shore of Florence Lake and marked 66 plus 43 on the east side, and which said post was planted by J. J. Newman, O.L.S., in 1911, on the line between the Townships of Parker and Dundee, I ran the first Base Line due west astronomically, intersecting the east boundary of the Township of Haentschel at a point 4.33 chains south astronomically from the north-east corner of the said Township of Haentschel.

From the end of the 6th mile on the first base line, I ran the fourth meridian north astronomicaly to intersect the south boundary of the Township of Corley

and south astronomically to the north boundary of the Township of Turner. The fourth meridian intersects the south boundary of Corley at a point 7.41 chains west of the south-east angle of the said Township of Corley. The fourth meridian line intersects the north boundary of Turner Township in a lake at a point 31 chains west of the second mile post on said township boundary.

Along these base and meridian lines most durable posts were planted every mile and half-mile, and where possible, a cairn of rock was piled around them. On the base line these posts were carved in Roman numerals on the east side, while the posts on meridian lines were carved on the south side. Where these lines intersected township boundaries, iron posts were planted with the names of the adjacent townships marked thereon with a cold chisel and the wooden posts were marked similarly.

PHYSICAL FEATURES.

The country throughout consists of high rocky successions of ridges running north and south, with a light overburden of soil, with very little agricultural land to be found. The formation of rock is principally quartzite and diabase, the quartzite being principally found around Florence Lake. A diligent search for mineral was made throughout the work, but none was found. A number of mining claims have been staked around the locality of Florence Lake, but no surveyed claims were to be found.

TIMBER.

The district throughout is heavily timbered, consisting chiefly of white and red pine, balsam, spruce, poplar, jackpine, and a few scattering groves of maple.

FISH AND GAME.

Moose, red deer and caribou are the principal species of large game, all being most plentiful. The small fur-bearing animals are the black bear, beaver, mink, marten, otter, fox and muskrat. Partridge, geese and ducks are very plentiful, and the various kinds of fish are speckled trout, pike, pickerel and bass.

Observations for azimuth were frequently taken on Polaris, and recorded in the field notes. The magnetic variations was found to be 8°30′ west.

Accompanying this report I submit a general plan on the scale of one mile to the inch, a timber plan, and field notes.

All of which is respectfully submitted.

I have the honour to be,
Sir,
Your obedient servant,
(Sgd.) R. S. Code,
Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 23.

Survey of the Outlines of the Township of Lowther, Templeton and Talbott, District of Algoma.

NEW LISKEARD, ONT., October 19th, 1912.

SIR,—We have the honour to submit the following report on the survey of the outlines of the Townships of Lowther, Templeton and Talbott, in the District of Algoma, made by us under instructions from your Department dated June 26th, 1912.

Work on this survey was commenced during the last week of July. started at the south-easterly corner of the Township of Way, which is also the southwesterly corner of the township of Kendall, both of which townships were being subdivided at the same time. From the south-easterly corner of Way we ran a meridian due south astronomically nine miles; thence west astronomically nine miles. We then brought a line south astronomically nine miles from the southwesterly corner of the Township of Way to intersect the east and west line already run by us. Those lines, with the south boundary of the Township of Way, form the boundaries of the Township of Lowther. From this intersection, which is the south-westerly angle of Lowther Township, a meridian was run south astronomically eighteen miles to intersect the base line run by O.L.S. Speight in 1910. From the same point we ran west astronomically nine miles and thence south astronomically eighteen miles to O.L.S. Speight's base line, above mentioned. From the end of the ninth mile on the most westerly meridian run by us we ran east astronomically nine miles to intersect the most easterly meridian which intersected O.L.S. Speight's base line, above mentioned. Those latter lines form the boundaries of the Townships of Templeton and Talbott, Talbott being to the south.

Good substantial squared wooden posts were planted at every mile and a half. In no place those posts came in a lake or a stream, so that no witness posts were planted. All those posts were properly marked with the mileage number from the east and south, from 1½ M to 9 M, for each township boundary. At the corners of the several townships an iron post was planted. Those iron posts, as well as the wooden posts at the same corners have marked on them the names of the Townships contiguous to the corner at which the post is planted; the names of the townships on the post facing in the direction of the respective townships.

PHYSICAL AND GEOLOGICAL FEATURES.

The country crossed by those lines is on the whole comparatively level, although in most cases sufficiently undulating to afford good drainage at such time when the bush is cleared and ditches dug.

The only stream of any importance passing through those townships is the Mattawishquia River. Several creeks and small streams drain into this; on the whole, affording fairly good drainage. This river from where it is crossed by the Algoma Central and Hudson Bay Railway is navigable for canoes to Hearst town and to its outlet on the Missinaibi River, although it is very rough in places. During the past summer it was used as a canoe route by the contractors on the Algoma Central and Hudson Bay Railroad from Hearst to where the river crosses the Algoma Central. Although only a distance of about fifty miles by the river, it took several days to traverse it with a loaded canoe, so that as a means of transportation

it is of very little use. We are told that there are numerous rapids and falls on this river, although none of importance were seen or measured by us. In any case there will be very little chance of any power development on this stream in those townships surveyed, as the banks of this stream are quite low, and consequently, very few facilities for damming purposes. In low water the discharge of the stream is very small.

The highest ground crossed by those outlines is on the east boundary of the Township of Lowther between Mileage One and Three, and on the west boundary of the Township of Talbott, which passes through a chain of lakes between M 3

and M 6, and in no place being very rough.

At approximately 2 miles and 50 chains on the south boundary of Lowther we found outcrops of fine grained basic igneous rock, probably a diorite and rich in horn-blende. Those outcrops continue at intervals up to 3 miles and 10 chains, and occur as north-east and south-west ridges, just rising slightly above the surrounding country, which contains boulders of the same formation.

Another small outcrop parallel to the former occurs at 5 miles and 30 chains on the south boundary of Lowther. At approximately 7 miles the line again crosses an outcrop of granite rising to the south 15 or 20 feet above the surrounding country. Between M 3 and M 4, on the west boundary of Templeton, outcrops of diorite cut by a network of acidic dykes and masses of very coarsely crystallized granite, almost pegmatitic, occur. From the character of the rock and the strike of the outcrops, which is west and south-west, it would appear to be of the same series of outcrops that was crossed by the south boundary of Lowther.

Occasional other small ridges of granite were crossed.

Lakes are not very numerous, the only lakes of importance being along the west side of the Township of Talbott.

TIMBER.

The timber crossed in those townships was, generally speaking, very small. Very little was seen that will be of much commercial value. There are, however, in places, small strips of spruce which will make pulpwood; but very little of the timber seen by us averages more than seven or eight inches. None of the country in this section has been burned during the construction of the Algoma Central Railway. The only brulé seen is on the west boundary of Talbott, along Wigwam Lake, and along the west boundary of Templeton from 2 M to 3 M. each case those brulé are at least five years old. The bush is almost entirely of spruce, which in places grows very thick. There are also a few ridges of poplar which runs as high as twelve inches in diameter, as well as small balsam and tamarac.

Soil.

The soil seems to be entirely of a sandy nature. In places there is a considerable depth of vegetable matter, after which is the sand, with small stones and boulders mixed through it. This can be plainly seen along the construction of the Algoma Central Railway. The soil in those townships is not a good clay like that seen along the Transcontinental Railway. Along the Algoma Central Railway the soil seems to change from a clay to a sand about nine miles south of the town of Hearst. This soil, howe er, in time will be turned into agricultural land, although it will not be so easily wo 'ted as the clay to the north owing to the great number of stones in it.

GAME.

Of the larger animals, the moose seems to be the only one to be seen, but the moose are very plentiful. In a few places we saw fresh beaver work, although they do not appear to be very numerous. No bears were seen although signs of small numbers of them are evident. Partridge are quite plentiful. There are also a few ducks on some of the lakes. Outside of the moose, it is not a very good game country.

Accompanying this report are also field notes and plans of survey. . .

We have the honour to be,
Sir,
Your obedient servants,
(Sgd.) SUTCLIFFE & NEELANDS,
Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 24.

SURVEY OF TOWNSHIP OUTLINES, DISTRICT OF TIMISKAMING.

COBALT, ONT., October 3rd, 1912.

SIR,—In obedience to instructions received from your Department, dated June 21st, 1912, I have the honour to submit the following report:—

The survey was commenced at the III mile and 41 chain post on O.L.S. Fitzgerald's Base Line, run in 1908. The line was produced east astronomically from this point to intersect the east boundary of the Township of Timmins at Mileage VI. and 64 chains, 81 links, which point is 4 chains 82 links north astronomically from the south-west angle of McEvay Township.

From the VI. mile post at the end of the base line run by O.L.S. Bell, in 1911, which defines the south boundary of the Township of McEvay, the meridian was run north astronomically to intersect the south boundary of the Township of Egan, this beilng O.L.S. Galbraith's base line. The intersection came at a point 14 chains 63 links west of the post between lots 10 and 11, and at chainage V miles, 77 chains 6 links. An iron and a spruce post were planted here, and marked "Timmins" on the south-west, "McEvay" on the south-east.

From the VI mile post at the end of the base line run by O.L.S. Bell, in 1911, which defines the south boundary of the Township of McEvay, the meridian was run south astronomically, passing 39 links west of iron and wooden posts planted by O.L.S. Bell, and marked "Nordica" on the north-east, and "Sheba" on the southeast. O.L.S. Bell's base line was produced to intersect my line. From this intersection the meridian was produced south astronomically to intersect O.L.S. Fullerton's base line at a point 16 chains 48 links west of the north-east corner of the Township of Baden. At the intersection point an iron and a six-inch Jack pine

post were planted, being marked "Sheba" on the north-east and "Robertson" on the north-west. From this point the line was chained north to the south-east corner of the Township of Timmins.

From the south-east angle of the Township of Fasken, the south boundary of the Township of Michie was run east astronomically 6 miles, 64 chains, 84 links, intersecting the west boundary of the Township of Nordica at a point 3 chains, 6 links north of the south-west angle thereof. At this point a 10 inch Jack pine post was planted, marked on the west, VI M and 64 chains, 84 links; on the southwest, "Robertson," and on the north-west "Michie." This completed the survey.

The details of the survey will be found in the field notes. The lines were well opened out, and well blazed. All posts were well planted and marked with the various names of the townships, bearing trees being taken very carefully in every instance. The instrument work was very carefully performed, and observations for azimuth were taken frequently on Polaris, the magnetic variation of the needle being from 8°15′ to 8°45′ west of north.

PHYSICAL FEATURES.

The country, although not too good for agricultural purposes, is not very rocky, except for a portion extending about a mile east and west of Trout Lake. With the exception of the north five miles of the east boundary of the Township of Timmins, the country is fairly hilly, the hills rising from one hundred and fifty to two hundred feet above the lake levels, but with long, easy slopes. The soil is very sandy, and in the Townships of Timmins and Michie, to the west and north of Trout Lake, where the fire has run through, the soil appears to be entirely sand.

WATERS.

The principal waters in this district are Trout Lake and Trout Creek. Trout Lake is very clear, and in places is more than one hundred feet in depth. Trout Creek is barely navigable by canoe, and there seems to be but very little difference in elevation between the levels of Trout and Night Hawk Lakes.

Small lakes are very numerous. No waterfalls were evident and no rapids, with the exception of a very small one on Trout Creek, just north of O.L.S. Fitzgerald's base line.

ROCKS AND MINERALS.

The rock formation is mostly granite, with the exception of a few small patches of Keewatin and Diabase.

TIMBER.

With the exception of a portion to the west and north of Trout Lake, which is very old brulé, and is overgrown with small pine of two or three inches on the stump, the timber is Jack pine, cedar, birch, balsam, spruce and poplar, of from eight to ten inches through.

FISH AND GAME.

With the exception of Trout Lake, where we were successful in catching two small lake trout, the lakes are full of pike.

The country abounds with moose, but as it has been well trapped over by the Indians, there are few evidences of beaver, mink or muskrat.

Partridges were very plentiful.

Accompanying this report I beg to submit a plan on mounted paper, of the district in general, a timber plan on tracing linen, and also a copy of field notes, including astronomical observations and magnetic variations.

I have the honor to be,
Sir,
Your obedient servant,
(Sgd.) T. G. Code,
Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 25.

SURVEY OF THE TOWNSHIP OF GILL, DISTRICT OF ALGOMA.

ELK LAKE, ONT., October 12th, 1912.

SIR,—Acting under instructions from your Department dated June 7th, 1912, I have completed the survey of the Township of Gill, in the District of Algoma. Herewith I am sending you copies of my field notes, together with a plan of the township on a scale of forty chains to the inch, traverse plans of the lakes and the White River and a timber map of the township.

With the exception of a comparatively small area of muskeg, on which there is only scattered small spruce and tamarac, and five or six thousand acres of burnt country in the north-west part, the township is well timbered with spruce, poplar, cedar, and white birch, and in the southeasterly part by Banksian pine. There is very little milling timber, but a large amount of valuable pulp wood.

About half the area of this township is more or less swampy. While this swampy land does not afford much encouragement for early settlement, most of it will, I believe, eventually make good farming land, as it will be comparatively easily drained, the creeks and rivers all having considerable fall and strong currents, thus

affording good outlets for the water.

The land most available for present settlement is that included in the burnt country previously mentioned. This land is practically all dry and of good quality and easily cleared. Most of the timber formerly standing on it is now lying on the ground, the trees in falling having taken the roots with them. There is only a scattered second growth of hazel and other shrubs, with some spruce, poplar, birch and Banksian pine not exceeding two inches in diameter.

Generally speaking, lots one to twelve in all of the concessions south of the National Transcontinental Railway are not desirable farming land. In concessions one to three these lots are largely sand and gravel hills with granite boulders, while some are swampy and a few muskeg. From the third concession to the railway they form the most swampy part of the township. West of the side line between lots twelve and thirteen, though, there is some muskeg and not a little swamp; there is a large quantity of very desirable farming land.

The White (or Nagagamissee) River, which enters the township in lot sixteen in the first concession is, from the northerly limit of the second concession to where it leaves the township in the west boundary of concession nine, largely a succession of rapids and waterfalls, the total fall in that distance being about 120 feet. As the volume of water estimated at ordinary low water is about 48,000 cubic feet per minute there is in this river a large amount of water power. No great amount of this power could be developed as a single unit as the slope of the land generally follows that of the river, and only towards the north are there any high banks. The highest fall is fourteen feet, and probably the highest that could be obtained from a single dam about twenty-five feet. I have, as shown in red on the plan and in my field notes, reserved from the lots a liberal allowance of land for the development of larger units. In order to give access to these and to permit the development of the smaller units I have reserved, as also shown in red, one chain in width along each bank of the river from the southerly limit of concession three to the railway. At the intersection of these reservations with the concession lines I have planted posts, marking them in the same manner as posts planted for road allowances about lakes except that on the side facing the water instead of the letter "R" I have put "W."

The following iron posts were planted:

At the S. W. corner lot 12, Con. 1, a post 11/4 inches in diam. marked Con. 1 on N. side, Lot XII on E. side, R. on W. side and R. on S. side.

At the S. W. corner of lot 12, Con. VII an iron post 11/4 inches in diam. marked Con. VII on north side, Lot XII on east side, R. on south side and R. on west side.

At the N. W. corner of Lot 12, Con. XII an iron post 11/4 inches in diam. marked Con. XII on south side, Lot XII on east side, R on north side and R on west side.

Trusting that this will meet with your approval,

I have the honor to be,
Sir,
Your obedient servant,
(Sgd.) A. D. Griffin,
Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 26.

SURVEY OF THE TOWNSHIP OF KENDALL, DISTRICT OF ALGOMA.

THESSALON, ONT., August 24th, 1912.

SIR,—In accordance with your instructions dated May 28th, 1912, I have surveyed the Township of Kendall, in the District of Algoma, and beg to submit the following report:—

The survey was commenced on the 10th of June and continued without interruption until completed on the 14th of August.

6 L.M.

This township is very easily reached, as the National Transcontinental Railway crosses it from east to west, and the townsite of Hearst is in the north-west corner of the township. The north-east corner of the township was surveyed first and the line between Lots 6 and 7 across Concessions 1 to 8 was run from north to south. The field notes, however, were reversed so as to read from south to north.

Iron posts were planted at the intersections of the centres of the road allowances at the following places: At Lots 12 and 13, Concessions 1, 6, 7 and 12, at the east side of Lot 1, Concessions 6 and 7, at the west side of Lot 29, Concessions 6 and 7, at the north-west and south-west corners of the township; and at Lots 6 and 7, Concession 12 (north boundary). Iron posts had already been planted at the north-east and south-east corners of the township.

The town site of Hearst lies in the north-west corner of the township, and all the land between the Transcontinental Railway and the Mattawishquia River as far west as the west boundary of the township is included in the town site.

The line between Concessions 10 and 11 intersects the town site near the north-east corner of Town Lot No. 1 and a tie to the corner of this lot is shown in the field notes.

The posts for the corners of Lots 25 to 29, Concession 11, were planted by measuring along the Transcontinental Railway track. They were then projected to their proper position, as shown in the field notes. These positions were calculated from the information obtained from the plan of the right of way and railway yards supplied me by your Department.

The lines throughout the survey were all well cut and blazed and the posts were carefully made and firmly planted in the ground. All posts and bearing trees are marked with a scribing iron. Bearing trees were noted at all lot corners wherever a suitable tree could be found and the bearings and distances of these trees from the respective corners are all entered in the field notes.

The traverse of the Mattawishquia River was carefully made with transit and stadia. The posts for Lots 23 to 29, Concession 10, were all projected as the traverse was being made, the bearings and distances being reduced at the time so as to give the lots their correct frontage on the river. In some cases where a small corner of a lot would have been cut off by the railway or the river, it was considered advisable to leave such corners with the lot adjoining on the same side of the railway or river, as the case may be. Those parts of Lots 22, 23, and 24, Concession 10, which lie north of the railway were posted as two lots and numbered 22 A and 23 A in order to avoid confusion. All thees lots are shown on the plan which accompanies this report.

In running the north boundary it was discovered by an observation that the bearing across Lots 1 to 6 was south 89° 39′ west. This line is straight, and the error was made in starting. I decided not to re-run the line, but deflected the boundary north at Lots 6 and 7 and ran across Lots 7 to 12 on a course north 89° 39′ west. Across Lots 13 to 29 the course of the north boundary is west astronomically. An iron post was planted where the line was deflected at the intersection of the line between Lots 6 and 7 with the north boundary.

Observations were taken where possible, a siderial watch and proper azimuth tables being used for this purpose.

Across Lots 12 to 18, Concessions 9 and 10, the railway is used as the blind concession line. These lots are posted as double fronts, the road allowance on each side of the right of way of the railway being posted as well as the concession lines at the fronts of these lots. These lots are shown on the accompanying plan.

This township as a whole is gently rolling, there being very few elevations that could be called hills and very few rock exposures. The soil is a loose clay and clay loam. At least fifty per cent. of the township is clay land, high enough to require little or no drainage. There are some muskegs of considerable size, but these can all be drained when circumstances warrant doing so. The drainage facilities are good, as the township is well watered with a number of small creeks, some of which are fairly large. None of the muskegs appear to be very deep.

The prevailing timber is spruce, with poplar on the high ground. The spruce is of a size best suited for pulpwood and runs from 6 to 14 inches in diameter. There are very few spruce trees over 15 inches in diameter, but the quantity of spruce of the sizes mentioned is very large, and if pulp mills are ever established in the locality this timber will be of very great value. Part of the township was swept by fire a number of years ago, and is now growing up with a dense growth of small spruce and poplar. Where this fire ran the land should be easily cleared, and in most cases is high and dry. I am of the opinion that when this township is opened up it will prove to be a valuable one for agricultural purposes.

The Mattawishquia River is quite wide in places, but the volume of water flowing in the summer months is not large. There are some shallow rapids within the township, making canoe navigation rather tedious. None of these rapids would

afford a water power of any value.

The magnetic variation is fairly constant at an average variation of 6° 15′ west.

Rock exposures are very few. The prevailing formation is granite.

There is only one lake of any size in the township, and this was properly traversed and the notes of the traverse are included.

Game of all kinds appear to be scarce, although rabbits are very plentiful in the small second growth. Traces of fresh beaver work were seen.

Herewith are plan, timber plan, field notes and accounts in triplicate all duly attested.

I have the honor to be,
Sir,
Your obedient servant,
(Sgd.) James S. Dobie,
Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 27.

SURVEY OF THE TOWNSHIP OF WAY, DISTRICT OF ALGOMA.

NORTH BAY, ONT., October 25th, 1912.

SIR,—We have the honour to submit the following report upon the survey of the Township of Way, in the District of Algoma, performed under instructions from your Department, bearing the date of June 17th. The work was started on the 16th of July, and completed on the 12th day of September.

The survey was commenced at an iron post planted by O.L.S. Speight to mark the corner between the Townships of Hanlan, Way, Kendall and Casgrain. This was the north east angle of Way, and from this point the east boundary

of the township was run south astronomically a distance of nearly 9 miles, being run to the intersection with the south boundary of the Township of Kendall as laid down by O.L.S. Dobie. From this intersection the south boundary was run west 9 miles, and then the west boundary was run north astronomically as far as the south boundary of the 11th concession. From this point the line was swung a few minutes in azimuth to close in on the previously established south west angle of the Township of Kendall.

The Mattawishquia River was traversed as was also a portion of the Cuckoo Creek and two small lakes occurring within the township.

Posts were planted according to instructions on the various intersections of the lot lines with the road allowances along the Algoma Central Railway and National Transcontinental Railway right of way. All lots along the several Concession lines were also posted at their front angles. On all such posts were carved the word "Con." and the Concession number on the north or south face as the case might demand and the numbers of the adjacent lots on the east and west faces. Posts were planted on the actual transit lines to mark these offsetted posts. These guide posts were carved "R" on the north and south faces, and the numbers of the adjacent lots on the east and west faces. Bearing trees were carved and noted in relation to all posts planted save the last mentioned guide posts.

Iron posts were planted in the following positions:-

- 1. In the east boundary of the township in the centre of the road allowance between concessions 6 and 7 marked "R" on all sides.
- 2. At the south east angle of the township in the centre of the road allowance and marked "Kendall" on the north east face, "Way" on the north west face, "Lowther' on the south west face and "R" on each face.
- 3. In the south boundary of the township in the centre of the road allowance between lots 12 and 13 and marked "R" on each face.
- 4. At the south west angle of the township in the centre of the road allowance marked "R" on each face, "Way" on the north east face and "Lowther" on the south east face.
- 5. In the west boundary of the township in the centre of the road allowance between concessions 10 and 11, marked "R" on each face.
- 6. In the centre of the road allowance between lots 12 and 13 and concessions 6 and 7, marked "R" on each face.
- 7. The iron posts planted by O.L.S. Speight at the north east and north west angles of the township are in the centres of the road allowances about the township and were carved "Way" and "R" in the former case on the south west face and in the latter on the south east face.

Our party suffered considerably in the matter of accidents. A number of our very best men being laid up through severe cuts. Rain also materially retarded our progress and our records show somewhat over 40 actual days of rain while on the survey. Because of this, astronomical observations were of necessity rather limited in number, but such were taken at every possible opportunity.

GENERAL FEATURES.

The country embraced by this survey is traversed in an easterly and westerly direction by the Mattawishquia River and in a north easterly direction by the Algoma Central Railway which forms a junction with the Transcontinental Railway in the northerly part of the township. The T. C. R. runs in a north westerly

direction through a portion of this township at the north east corner. From these remarks it may be deduced that the township is easy of access for settlers. Such is quite the case and construction of the Algoma Central Railway is well under way, and steel will be laid in all probability during the coming winter. The Mattawishquia River, while in the main having a good width and a fair depth, nevertheless is broken by numerous swift, rocky rapids, hence cannot be utilized for other means of transportation than canoeing. This river permits of no water powers within the limits of the township.

The country has been entirely burned over a period of 50 or 70 years ago. Evidences of this fire were found every day thoughout the entire survey. The country is very level and but few water courses were found within the limits of the township. Cuckoo Creek was surveyed for only a portion of its length and this at its junction with the Main River, in order that the road allowance might be accurately plotted as far as the first concession line, south of the junction. The remaining portion of this creek, although at times it attains a fair width could scarcely be called navigable, and hence was not traversed. On account of the country being level very much of the land is low and swampy.

Soil.

The soil chiefly encountered is a very rich clay loam, and various evidences were noted along the railway lines of the abundant growth of hay, oats, potatoes, etc., of which it was capable. On the higher knolls the soil is somewhat lighter, while on the lower swampy portions the soil is covered with a deposit of black muck, but this will make equally as good land for agricultural purposes when the country is cleared and drained. Very little of the actual worthless muskeg was encountered but in the field notes there are noted a number of these areas.

TIMBER.

The almost sole timber of the township is spruce, and this in size runs in general from 4 in. to 8 in. Along the Mattawishquia River and Cuckoo Creek are splendid groves of spruce of a larger size, running from 10 to 18 in. in diameter. Inland from these streams no large spruce were found. Poplar of a size from 8 in to 15 in. in diameter were found on the banks of these streams and scattered throughout the township on the higher knolls. Considerable areas were covered with thickets of small spruce and balsams from 1 in to 3 in. in diameter.

MINERALS.

No outcroppings of rock were found during the survey but we submit to you two samples taken from a rock cut in the bottom of a clay cut on the line of the T. C. R. at Mileage 236 about.

GAME.

Moose are very plentiful although no red deer or caribou were seen. Bears are also very plentiful and our stores suffered more or less from their depredations. Partridge, mink and beaver are also quite plentiful.

GENERAL REMARKS.

The proximity of this township of Hearst, the divisional point of the T.C.R. and the fact that this railway together with the A. C. R. both traverse the township makes it probable that this township will be thoroughly colonized when thrown open. The settlers in the southern portion of the township will by means of the concession roads have easy access to the A. C. R. line, while those in the northern portion of the township, by means of the side roads will have easy access to the T. C. R.

Accompanying this report are the usual returns, consisting of plans, tracing, field notes, triplicate accounts, etc., all of which are respectfully submitted.

We have the honour to be,
Sir,
Your obedient servants,
(Sgd.) McAuslan and Anderson.

per H. M. Anderson.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 28.

RE-SURVEY OF PART OF THE TOWNSHIP OF MATTAWAN, DISTRICT OF NIPISSING.

OTTAWA, ONT., September 16th, 1912.

SIR,—I beg to submit the following report on the survey of part of the township of Mattawan, in the District of Nipissing, under instructions dated July 12th, 1912.

The party was outfitted at Ottawa and on the first day of August, 1912, left for Mattawa.

After questioning all the settlers in the district to be surveyed, it was found that the nearest post to the work that was known to any of them was that between Lots 33 and 34, on the north side of the road allowance between Concessions 7 and 8.

There the survey was commenced and by running a line on the approximate bearing, always looking for evidence of the true line and when such evidence was found these points were joined up by straight lines. In this manner the following intersections were obtained, viz.:

Lots 10 and 11, Concessions 7 and 8,

Lots 15 and 16, Concessions 7 and 8.

Lots 20 and 21, Concessions 7 and 8,

Lots 10 and 11, Concessions 9 and 10.

Lots 15 and 16, Concessions 9 and 10 and

Lots 20 and 21, Concessions 9 and 10.

Posts were planted at these intersections, the chainage between them carefully ascertained, and other posts were planted to mark the lot corners by proportioning the chainage according to that given in the original field notes.

Owing to the fact that lumbermen have been operating in this country for a great many years and also owing to the fires which have overrun this territory, evidence of the original lines has, in places, been completely obliterated.

A traverse was made along the concession lines across lots 11 to 20, and also on the road allowances between lots 15 and 16 and between lots 20 and 21. No traverse was made of the road allowance between 10 and 11, as the true line was not cut out all the way.

I enclose plans in duplicate, field notes and also accounts in triplicate.

I have the honour to be, Sir, Your obedient servant, (Sgd.) FRANK E. PATTERSON, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines. Toronto, Ont.

Appendix No. 29.

SURVEY OF THE TOWNSHIP OF NANSEN, DISTRICT OF TIMISKAMING.

GANANOQUE, ONT., October 1st, 1912.

SIR,-I wish to report that following instructions from you bearing date May 29th, 1912, that I have completed the survey of the north eight concessions of the said township in all 34,907/7 acres, and am submitting for your approval and inspection the field notes and plans of the same, and that during the course of my survey I have inspected closely the soil and have come to the following conclusions:

RE SOIL.

The greater portion of the tract is a muskeg moss, and vegetation matter partially decayed over a clay subsoil.

There is, however, a strip of country along the spur of the Transcontinental

Railway constructed by Messrs. Fauguier that is a gravelly and sandy loam.

Messrs. Fauquier have taken gravel from pits 4, 5 and 6 respectively L. 0. 465 L. 0. 489 and H.S. 2,000 the gravel from pit 4 L.O. 465 that was in sight in the cut is of such quality that I do not believe that the persons in charge will use any more from this pit.

Pit 5 L.O. 489 is exhausted.

Pit 6 H. Sight 2,000 carries, I understand, the best gravel to be had in this section of the country, and is supplying Fauquier's construction needs at several points at present.

Further, that I have inspected the timber growth and have the following

summary:

TIMBER.

There is a portion of this tract approximately 9,000 acres of brulé or burned over tract. On this are dry trees and windfalls to 8 inches in bottom. This timber I consider of no value, but over the greater portion of this brulé it would be very light clearing for settlers and the fire has left the soil in good condition.

The balance of area covered by me of approximately 25,000 acres is a spruce growth varying to an 8 and 10-inch bottom, the average about 6 inches, there are a few patches of cottonwoods, birch and balsam, but nothing to speak of.

I do not consider the timber on this tract in any way valuable as a lumbering proposition, but I think the same should have considerable value for pulp purposes.

Rock.

There are only a few ridges of rock all of which I have shown on the plans, this is a granite formation.

I spent time on the croppings and failed to find any leads of valuable mineral.

Gravel is mentioned under soil.

DRAINAGE.

The various creeks flowing to the lakes and Ground Hog River, will on improvement give good outlet and can be improved at comparative small cost with proper outlay of improvement work.

I consider this tract a good extent of country and might suggest a consideration for this district in line with the improvement work that is being now carried out in North Ontario, the spur of the Transcontinental Railway gives access, the burned over tract should find favor with settlers as their holdings could be much more easily improved.

Iron bars were planted at intersections of lines actually run at fronts of Concessions 5, 7 and 12 between lots 12 and 13 the same being marked by cold chisel on east and west with lot numbers and on north and south with "Con." and number of the concession found.

I have the honour to be,
Sir,
Your obedient servant,
(Sgd.) H. O. Dempster,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines. Toronto, Ont.

Appendix No. 30.

ALGONQUIN NATIONAL PARK OF ONTARIO.

ALGONQUIN PARK, 31st December, 1912.

Honourable Sir,—I beg to hand you my fifteenth annual report on Algonquin Park, of which I have the honour of being Superintendent, and trust it will meet with your approval.

Our staff for the past year has consisted of twenty-six men, a housekeeper and superintendent. During the trapping season—from the first of September to the first of June—the time of the staff is taken up patrolling the sections over which they have charge, to prevent illegal trapping and other breaches of the Park laws. Our men travel in pairs. The area of each section is governed by the water stretches and the ease with which it can be covered; some men cover more ground than others, owing to the fact that a great part of it is accessible by water. I feel that the staff have done good work. Illegal trapping is certainly on the decrease. We had only two eases during the past year; in each the offender was fined \$50.00 and costs, the fine being paid in both cases.

Our men also took out a quantity of fur during the trapping season, it having become so abundant that a large quantity can now be taken annually.

During the remainder of the year the time of the men is taken up in building new shelter houses, cutting portages, cleaning out streams, making improvements at headquarters, etc. We have built three new shelter houses during the past year, one on South River, one on Long Lake, and one on Tim's Lake. These are all substantial buildings. Some of the old shelters have been repaired, and at headquarters the boat house has been rebuilt. An acetylene gas plant has also been installed with a capacity of 50 lights. The slash along the Madawaska River has been cleaned up, adding very much to the appearance of the river, and also to the safety from fire.

Our men at all times act as fire rangers, and their duties as such take precedence over everything else. By acting in conjunction with the regular fire rangers a good work has been done, and I am glad to inform you the year has passed without any serious damage being done by fire in the Park. We have hundreds of canoeists on our lakes and rivers during the summer and fall, but very few fires are traceable to them. We find most of our fires originate either from the railway or lightning, generally the former.

The Canadian Northern Railway Company has been at work on construction ever since last January through the townships of Deacon, Boyd, and Pentland. Some hundreds of men are employed, and the work has been pushed ahead rapidly. I am glad to report very little trouble with fires, and less with their men breaking the law. Four special men were put on to act as fire rangers; these with the help of our regular men have kept a close supervision over the work, and I feel I have done well. This railway, skirting as it does all our best lakes and rivers, will become a very popular tourist route, and will necessitate more men on that section. Game of all kinds has very much increased in the Park and the surrounding sections. Last spring 480 beaver, 12 otter, 11 marten, 5 fisher, 71 musk rats, 8 ermine and 89 mink skins were sold, also several beaver and otter for mounting specimens. In addition 21 live beaver were sold at \$50.00 a pair f.o.b here. Of these two went to Kentucky, two to Philadelphia, nine to New York, two to

Unionville, Ont., two to England and four to Prince Edward Island. We also sold four young foxes. The amount realized by the Department at Toronto from sale of furs and live animals was \$5,959.05. I have on hand at present 14 beaver, 130 mink, 19 marten, 7 fisher, 5 raccoon, 32 musk rat, 6 otter and 14 ermine skins, and I hope to have the best showing of furs at the coming spring sale yet offered.

Wolves, I regret to say, are still very numerous and have already begun their winter's work of destruction. I estimate we killed over one hundred of these brutes during the past year, and nine have been brought in this winter already. Our men are doing their utmost to rid the Park of these pests. There is no doubt a great many come in from Quebec during the winter, as there is such an abundance of food to be found in the Park.

Fishing during the past year has been good. Some fine specimens of the true salmon introduced here three years ago have been taken. One sent to Professor Prince of the Fisheries Department, Ottawa, measured 18 inches, and was pronounced by him to be the best specimen they had received from any point where these gamest of fish have been introduced. The Government last summer put a quantity of salmon trout fry and small-mouthed bass into the lakes near headquarters. We have here a splendid location for a good hatchery, and I should like very much to see one established. We could not only keep our own stream stocked, but could supply the rest of the Province as well. The first grand prize for salmon trout in the two thousand dollar contest organized by Field and Stream was awarded a Mr. G. W. Collier of Bordentown, N. J., for a salmon trout caught in Lake of Two Rivers, Algonquin Park. It measured 30½ inches.

As a health resort and pleasure ground, the Park is now very popular; so much so that the Grand Trunk people have doubled the capacity of the Highland Inn and are building a series of camps at Smoke Lake and other points in the Park, consisting of six cottages, a guide's house and eating house, with other necessary buildings, with a view of making round trips from the hotel here without taking tents, etc.; this at an approximate cost of \$70,000.00.

Not only is the Park popular as a summer resort, but is fast becoming a winter resort also. People who visit it once in winter wish to come back; there are at the Inn now over sixty guests and this will keep up all winter. The hotel at Joe Lake is also well patronized during the summer months, but closed in winter. We have three large camps of schools, Miss Case on Cache Lake with her school of fifty girls; the Bordentown Military School at Lake of Two Rivers, and the Long Trail Camp for boys on Joe Lake. The Y.M.C.A. also of Buffalo send in a camp of young men each year.

The amount collected here during the past year for licenses was \$1,146, for rents, \$285.00, fines, \$100.00; this does not include moneys paid direct to the Department.

CAPERCALZIE.

These birds introduced from Norway some years ago are not making the showing I had hoped. Several were seen during the past year, but from reliable information I believe many went north of the Canadian Pacific Railway. In time they may become numerous. They evidently seek the dense pine woods.

Lumbering is still going on to a considerable extent in the Park, but the firms of Brennen & Sons, A. Barnet & Co., J. D. Shier, Mickle, Dyment & Co.,

and the Huntsville Lumber Co., have cut out their limits, and I would strongly recommend all this territory being taken over by the Government. It would include the townships of McCraney, Hunter, McLaughlin, Finlayson and Peck. The firm of Brennen & Sons have moved their mill from Rainy Lake in the Park to the village of Kearney, which leaves only the mill of A. Barnet & Co., in the Park. It did not run last year, all the timber that would come to it of all kinds being cut.

RE LEASES.

Several were granted during the past year on Cache and Canoe Lakes, and there are several other applications, I would respectfully recommend that no leases be granted for some time to come except upon the lakes near headquarters. It is certain that with the Canadian Northern going through the north end of the Park there will be applications coming in from parties wishing to locate in that section. I think it should, however, be kept as near in a state of nature as possible, and be left as one spot in the province where all men can enjoy the same privileges. This northern section is a paradise for the canoeist and angler that cannot be equalled in America.

GOVERNMENT LIMITS IN THE PARK.

We have now good shelter houses all through the newly acquired territory, and the game has already perceptibly increased. Four fire rangers were put on this year, two being located at Great Opeongo Lake and two at Lake of Two Rivers, these with the co-operation of the regular staff were able to control all fires started, excepting one at Rock Lake, where a few men had to be hired. I am pleased to say no damage was done this year to the standing timber.

I have the honour to be,
Your obedient servant,
G. W. BARTLETT,
Park Superintendent.

The Honourable, W. H. Hearst,
Minister of Lands, Forests and Mines.
Toronto, Ont.

Appendix No. 31.

RONDEAU PROVINCIAL PARK.

Morpeth, 4th January, 1913.

SIR,—I have the honour to submit this my report as caretaker and ranger of the Rondeau Provincial Park for the year 1912.

This has been a wet, cold and backward season, consequently the picnic season was shorter than usual. In the spring when the ice in the Eau broke up, a high wind was blowing which caused the ice to damage the Park dock, knocking it considerably out of shape. I had it levelled up again, and put it into good condition at a cost of \$21.00, and to prevent a repetition of this trouble next spring. I am now having the corners of the outer-end crib bound with thin boiler plate steel 4 ft. x 4 ft. x ½ in. thick.

The floor and posts in the old open pavilion were showing considerable decay in places, and according to instructions from the Department the building has been partially overhauled, painted, and put into fair condition again, at a cost of \$186.00—painting \$140.00, repairing \$46.00 This pavilion was built sixteen years ago and has been painted and repaired from time to time; but as the unpainted floor, posts, etc., have been exposed to the rains and change of weather all this time, they, as well as the under supports of the building, are not in a condition that would warrant a large expenditure in repairs. It should be replaced by a new pavilion in a few years.

The new drive road through the Park forest is nearing completion, but is costing more than we at first anticipated. Taking the stumps out of the ground and getting them off the roadway was a slow, laborious task under the system of grubbing around them and hauling out and off with rope and tackle. But when we adopted the use of stumping powder and engaged the services of an expert blaster, this part of the work went on more rapidly and satisfactorily. The blasting not only jarred the stumps and caused the soil to leave the roots, but shattered them into pieces so a team could handle them quite easily, and they could be piled in heaps to be burned later. Many of the smaller stumps landed several rods away in the bush, and did not require handling again. The soil being a light. sand made it necessary to use more than double the quantity of stumping powder than would be needed in clay or gravel. However, we have the stumps all out, the holes filled in, and most of the hollows or low places in the road bed filled in. This was a tedious part of the work on account of having to get the soil for filling from among the roots or wherever it could be got at. The road is now completed for a distance of about one mile from the picnic ground, that is the driveway is levelled and graded to a width of 16 feet. When the frost goes out of the ground enough to resume levelling, the work will be continued until completed. I might say that the mosquitoes and flies became so troublesome we were compelled to stop work on the road on June 25th, and did not begin again till October 15th. These pests were worse than usual this year. Had it not been for this delaythe new road would have been completed early in the fall of this year. However, we will have it in good shape for the season of 1913. The total cost to date is about \$2,641.00. The present high price of labor makes this job cost fully onethird more than it would have ten or twelve years ago. The above prices does not include the gravelling of that portion of the road leading through the picnic grounds.

The old road leading into the Park had not been gravelled for three years, and as it needed it badly in places I had it gravelled from the townline up to the pavilion, then continued with a much heavier coat up through the picnic ground on the new road. The total cost of gravelling was \$635.20.

The sawlogs that were cut out of the trees that stood on the new roadway and sold have not been taken away from the Park yet. The firewood we cut out of the tops of these trees will furnish the Park Ranger with fuel for two years, besides supplying the cottagers who camp on the Park with fuel at \$2.25 per cord. I have sold over \$70.00 worth to them this season, and forwarded the amount to the Department.

The red deer on this Park have been breeding for about ten years and increased until they numbered up into the hundreds. They became so numerous that they have browsed and destroyed a large number of the young pine, cedar and seedlings of other kinds of trees on the Park, and also on properties adjoining. They have been seen pasturing on farms nearby, 15 to 25 in a herd. Complaints from the farmers and destruction of the young growth here caused the Department to arrange to reduce the number. Consequently two expert deer hunters were sent, and during the deer season succeeded in killing about 90. Besides selling about \$800 worth of venison, the Department gave a carcass to each person who had sustained loss. As there are still quite a number of deer left, it will probably be necessary to repeat this action in another year or two.

Muskrats have been giving trouble along the sand approach to the dock, by cutting holes through behind the sheet piling into the sand, allowing the water to wash out large holes. We dug a trench along the low dock, put in plank and filled behind with marsh grass to keep the sand from washing out, but that only lasts a short time. We put in the grass twice this season and there are several fresh washouts already. To make a permanent job, a trench should be dug when the water is low in the spring, between the sand and the dock, as deep as the water will allow, and put in a cement wall. A wall 6 inches thick along the low dock would be sufficient. At the end of the high dock it should be 10 inches thick. This, I think, would prevent the rats doing further damage to the dock.

A few weeks ago some person fired the marsh grass at the farther end of the Park. During the night, while we were alseep, a high wind drove the fire to this end, and it narrowly missed burning the whole row of summer cottages. We were awakened by the light of the burning leaves, grass and old buildings across the picnic grounds, about six o'clock in the morning. We just got there in time to put out the fire in one building and save two others. When the fire was well under control we found that it had burned three unsightly old boat houses, an old shack formerly used as a summer cottage, and a small stable. None of these structures were of much value, but there were several boats and a large number of decoy ducks burned in them.

If the coming season is favorable for picnics and summer resorters, it is the general impression among the people here that, with the completion of the new road and a few other improvements that will be made in the spring, the season of 1913 will be the best in the history of the Park; so many are anticipating the pleasure of driving through the natural forest on the new road. There have been as many as 75 automobiles here in a day this season, and often from 30 to 40.

The wild geese in the enclosure have done well this season, but the wild turkeys have not given satisfactory results at all. After the two hens had been setting about a week something disturbed them and they left the nest. In a few

days they made new nests, laid again and set. They hatched 13 chicks. At the present time the gobbler, two hens and one young hen remain. We gave them their liberty from the beginning of the season, and some days they would go over two miles up into the forest. So far as we know they have had a first-class chance to do well, but it seems their enemies have been too many for them. The four that are left seem strong and hardy birds, and I think perhaps we should give them another trial next season.

Mr. F. D. Weir, the lessee of the refectory and also the boat livery, has had a poor season, the cold, backward weather being much against his business. Bathing was not so popular on account of so much cool weather. We look for a better and brighter season in 1913.

I have the honour to be, Sir,

Your obedient servant,

ISAAC GARDINER,

Ranger.

The Honorable W. H. Hearst,
Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 32.

SUPPLEMENTARY LIST OF LICENSED CULLERS 1912.

(For complete list see Minister's Report, 1911.)

Brown, R. A	Webbwood
Clearihue, Geo. A	784 St. Hubert St., Montreal, QuePembroke
Fraser, DarlingtonFaulkner, Wm	Pembroke Dryden
Hartt, I. B	
Jones, Wellard	Ignace
Kennedy, Frederick J	Buckingham, Que.
Macdermid, Harry Morel, H. (Jr.) Molyneaux, Harold Marchildon, J. P Main, G. C McIntosh, Herbert	MattawaParry SoundSturgeon FallsFort Frances
Norgate, Chas	Dryden

Appendix No. 33.

THE ABITIBI PULP LIMIT AGREEMENT.

THIS AGREEMENT made in duplicate this twentieth day of August, one thousand nine hundred and twelve;

BETWEEN:

HIS MAJESTY, represented by The Honourable The Minister of Lands, Forests and Mines for the Province of Ontario, Hereinafter called "The Government"

of the First Part,

and

SHIRLEY OGILVIE and FRANK HARRIS ANSON, both of the City of Montreal in the Province of Quebec, Capitalists, Hereinafter called the "Grantees"

of the Second Part.

Whereas by advertisement duly published The Honourable The Minister of Lands, Forests and Mines for Ontario called for tenders to be received by him up to and including the 15th day of August, 1912, for the right to cut pulpwood on a certain area, situated on the Abitibi Lakes and River tributary to the Grand Trunk Pacific Railway and The Temiskaming and Northern Ontario Railway, hereinafter more particularly described;

AND WHEREAS on the said 15th day of August, 1912, the said The Honourable The Minister of Lands, Forests and Mines received from the Grantees a tender for the right to cut pulpwood on the said area which said tender was on the day of the date hereof approved and accepted by His Honour the Lieutenant-Governor-in-Council;

AND WHEREAS the Grant of the right to cut pulpwood upon said area was by said advertisement for tenders and by the tender of said Grantees to be upon certain terms and subject to certain conditions and stipulations;

AND WHEREAS this agreement is entered into for the purpose of ensuring the performance by the Grantees of their obligations as hereinafter defined, and of securing to the Grantees a continuous supply of wood, adequate water power privileges and lands, for the purpose of the business to be established, maintained, conducted and carried on at Iroquois and Couchiching Falls in the said area upon the terms and subject to the conditions and stipulations hereinafter contained;

Now Therefore This Indenture Witnesseth and it is agreed by and between the Grantees and the Government as follows, that is to say:

- 1. The Grantees shall with all convenient despatch proceed to the construction of a pulp mill or pulp mills at or near Iroquois Falls within the limits of the territory hereinafter described and will thoroughly equip the same so that the expenditure in the construction and equipment of the said pulp mill and of such other buildings and constructions as are necessary to the undertaking will be at least five hundred thousand dollars (\$500,000.00) and will operate the same so that the daily output of the said mill or mills shall not be less than one hundred tons of pulp, and so that at least two hundred and fifty hands on an average shall be kept employed in connection therewith for at least ten months of each and every year;
- 2. Of the said sum of five hundred thousand dollars not less than one hundred thousand dollars (\$100,000.00) shall be expended within one year from the date hereof and not less than two hundred thousand dollars (\$200,000.00) within two years from the date hereof, and the balance within three years from the date hereof;
- 3. The Grantees shall within such time and at such place within said territory as the Lieutenant-Governor-in-Council shall direct, erect a paper mill of the capacity of at least one hundred tons of paper per day, and shall after the erection thereof operate the same continuously so that the daily output shall not be less than seventy-five tons of paper per day;
- 4. The Grantees shall pay to His Majesty, His heirs and successors in advance at the Treasury Department, Toronto, yearly and every year during the period hereinafter mentioned for the cutting and removal of wood the sum of five thousand dollars (\$5,000.00) of which payments of five thousand dollars each, the first five, amounting to the sum of twenty-five thousand dollars, have been paid in advance by the Grantees, and the receipt of which is hereby acknowledged;
- 5. The Grantees shall during and after the year 1913 advance for the purpose of being expended or shall expend as and when The Honourable The Minister of Lands, Forests and Mines may determine, sums of money up to a total of fifty thousand dollars in clearing, erecting buildings and preparing for settlement lands selected by the Minister in the neighborhood of Iroquois Falls, such lands to remain the property of His Majesty and to be disposed of at such prices and upon such terms as the said Minister may determine, subject to a lien, as against purchasers of said lands, in favour of the Grantees for the amounts advanced or expended by the Grantees and interest thereon, the same to be repaid to the Grantees at such times and in such manner as the said Minister may determine;
- 6. The Grantees shall assist and co-operate with the Government in promoting settlement upon the lands of His Majesty in the said District by buying the wood and agricultural products of and giving preference in the matter of employment to bona fide settlers upon said lands;
- 7. The Grantees shall forthwith proceed to incorporate and organize a Joint Stock Company under the provisions of the Ontario Companies Act, with a subscribed capital of at least One million five hundred thousand dollars (\$1,500,000.00) for the purpose of developing water powers, erecting mills and carrying on the business of manufacturing pulp and paper in said territory;
- 8. In consideration of the said expenditure and of the contracts and engagements entered into on the part of the Grantees, the Government will and doth for the rates and prices hereinafter set forth and provided, and subject to such

reasonable terms, conditions and regulations as to the locality and the manner of cutting, measuring, removing, and driving the same as may from time to time be imposed by the Lieutenant-Governor-in-Council and subject also as is hereinafter set forth and contained; grant to the Grantees the right to cut and remove, spruce, balsam, banksian or jack pine, poplar and whitewood trees, seven inches and upwards in diameter, two feet from the ground, sufficient to supply the mill or mills to be erected for a period of twenty-one years from unoccupied, unsold and unlocated lands of the Crown as follows: being composed of land situate near the upper and lower Abitibi Lakes and along the Abitibi River, and its tributaries in the District of Temiskaming, containing by admeasurement fifteen hundred and sixty square miles, more or less, the outlines of which are more particularly described as follows, that is to say: Commencing at the north-west angle of the Township of Stimson, sixteen miles east of the Town of Cochrane at the junction of the Temiskaming and Northern Ontario Railway with the Grand Trunk Pacific Railway; thence east astronomically fifty-four miles, more or less, to the interprovincial boundary line between Ontario and Quebec; thence south astronomically along said boundary line forty-two miles; thence west astronomically twenty-three and one-half miles, more or less to the south-east angle of the Township of Michaud; thence continuing west astronomically along the south boundary of said Township six miles to the south-west angle; thence north astronomically along the west boundary of the said last-mentioned Township six miles, to the south-east angle of the Township of Munro; thence west astronomically along the south boundary of said Township of Munro six miles to the south-west angle thereof; thence north astronomically along the west boundary thereof six miles to the south-east angle of the Township of Coulson; thence west astronomically along the south boundary of the said Township of Coulson, and along the south boundary of the Township of Wilkie, twelve and a half miles more or less to the south-west angle of the latter; thence north astronomically along the west boundary of the said Township of Wilkie six miles, to the southeast angle of the Township of Teefy; thence west astronomically along the south boundary of said Township six miles to the south-west angle thereof; thence north astronomically along the west boundary of the Townships of Teefy, Edwards, Mortimer and Stimson, twenty-four miles, to the place of beginning;

EXCEPTING AND RESERVING nevertheless from the above described area the Townships of Warden and Milligan, the Abitibi Indian Reserve, the land covered by the waters of Upper and Lower Abitibi Lakes, and all islands therein, the right of way of the Grand Trunk Pacific Railway, including station grounds, all townsites, all lands heretofore patented, leased, located or applied for, in respect of which such proceedings have been taken, or shall hereafter be taken, as in the opinion of the Minister of Lands, Forests and Mines entitles the applicant or applicants to a lease or Patent for such lands:

- 9. The Grantees shall pay forty cents per cord for spruce, and twenty cents per cord for the other woods above mentioned, or such other prices as may from time to time be fixed by the Lieutenant-Governor-in-Council for such wood, but in no case shall the price so to be fixed be at higher figures than the price at which the general public shall be permitted to cut on other portions of the Crown domain or than others similarly situated, shall be permitted to cut;
- 10. The Grantees further covenant, promise and agree with the Government that they will from year to year put on such a force of firerangers as the Government shall consider necessary to protect the lands aforesaid from fire, and will

pay one-half the cost and expense of such fire ranging, the other half of such cost and expense to be borne by the Government;

- 11. No wood shall be cut under this agreement until after the sum of one hundred thousand dollars shall have been expended on the erection of said pulp mill and equipment thereof;
- 12. The Crown may revoke the right, license or permit to cut, and forfeit any bonus paid whenever the Grantees shall fail to comply with the terms of this agreement;
- 13. It is distinctly understood and agreed that only the right to cut wood as aforesaid is sold to the Grantees and not the soil or any part thereof, nor is any interest in the soil so sold, except in so far as may be necessary, to cut and remove the woods as aforesaid, and the wood when so cut shall (subject to the payment of the price thereof) become the absolute property of the Grantees;
- 14. The Government shall retain the right to sell, lease, locate or otherwise dispose of any lands included in the territory on the same terms and conditions for settlement, mining or other purposes as ordinary Crown Lands situated elsewhere, and this agreement is not to impede or retard settlement or mining operations, and nothing herein contained shall limit or affect the right of the Department of Lands, Forests and Mines to sell, locate, lease or otherwise dispose of lands in the aforesaid territory for settlement, mining or other purposes, but the same shall be as free for such disposal as if this agreement had not been made; and where any lands are so sold, located, leased or otherwise disposed of the rights of purchasers, locatees, lessees or other parties entitled to the said lands in and to the timber thereon shall be the same as if this agreement had not been made;
- 15. Nothing herein contained or to be done hereunder or by virtue hereof shall entitle the Grantees to a monoply in the use of any river, streams or lakes, or tributaries thereof in the said territory, but the same shall be and continue open for the use of the public in accordance with the law in that behalf. But in view of the character of the industry to be established, the investment of so large an amount of capital and the probable enlargement of the industry in the near future, it is understood that the Government will not grant, sell or confer upon any other person or persons, corporation or corporations the right to cut pulpwood within the territory hereinbefore referred to for the purpose of export before being manufactured into pulp, or the right to cut pulpwood within or upon the said territory, the granting of which rights would, in the opinion of the Minister of Lands, Forests and Mines for the time being, have the effect of so far lessening or diminishing the supply of pulpwood in the said territory during the period covered by this agreement, and which under this agreement will be available for the making of pulp by the Grantees, as to prejudicially interfere with the Grantees during that period in obtaining all the pulpwood necessary for supplying the said mills and any extensions thereof that may be made in the meantime of extensions which may be under construction and bona fide in process of completion.
- 16. It is distinctly understood and agreed that nothing herein contained shall, without the consent in writing of the Minister of Lands, Forests and Mines for Ontario, be deemed to confer any right to cut or remove timber from any territory or areas already under license from the Crown, or which may hereafter be placed under license for the cutting of white and red pine timber, nor shall any cutting take place under this agreement in or in the immediate proximity of territory covered by green merchantable white or red pine available for lumbering purposes or which may be considered by the Government to be pine bearing

lands. If, however, the wood in the other part of the available territory has been exhausted or is insufficient for the requirements of the Grantees' Mills, the Grantees may cut in the vicinity of such pine bearing lands upon such terms and conditions as may from time to time be agreed upon between the Government and the Grantees, or, if they cannot come to an agreement, upon such terms, conditions and regulations as may from time to time be imposed by the Lieutenant-Governor-in-Council or by the Minister of Lands, Forests and Mines, for the purpose of affording ample protection to the standing pine, PROVIDED, HOWEVER, and it is understood and agreed, that the Grantees shall not be entitled to cut wood of any kind on said territory or on any part thereof for the purposes of export in the wood nor for sale to other persons for export in the wood;

- 17. It is Hereby Agreed that nothing in this agreement contained shall prevent the Government from selling the right to any person or persons to cut white and red pine trees on any part of the territory hereinbefore mentioned, which has not already been placed under license, and to grant timber license in respect thereof under the Statutes and regulations in that behalf, and in no case shall the Grantees be entitled to cut the pine trees other than banksian pine unless under special permit or license from the Government or the Minister of Lands, Forests and Mines. But in the case of the sale of the right to cut white and red pine trees as in this clause hereinbefore mentioned, the sale of the right to cut shall be confined to the white and red pine trees only, and to such other timber as may be necessary to cut and remove the same;
- 18. Nothing Herein Contained shall require the Government to provide any particular quantity of wood, as the Government in no case guarantees quantities or does anything more than grant the right to cut such wood as aforesaid within the aforesaid limits, and nothing herein contained shall require the Grantees to purchase any particular quantity of wood, or to pay for any wood not actually cut upon the said territory, but it is clearly understood and agreed that so long as the supply of wood upon the said territory is sufficient to supply the mills of the Grantees herein referred to, the Grantees will take their supply of wood therefrom; except such as may be purchased by the Grantees from bona fide settlers in the District;
- (a) It is also Hereby Declared that the intention of these presents is that the Grantees-shall at all times during the term of twenty-one years from the date of commencement of cutting obtain a sufficient supply for their pulp and paper mills, so far as the same can be found available within the limits hereinbefore described, and so far as the same can be obtained consistently with the terms of this agreement;
- 19. If the Grantees shall not within three years from the date hereof expend at least the sum of five hundred thousand dollars (\$500,000.00) in erecting the said pulp mill and other necessary buildings and constructions as aforesaid, and in the constructions and equipment thereof, and in preparing for the operation of the same, and for getting out the wood for the supply of the said mill, this agreement shall become null and void; and of no effect in so far as the whole territory is concerned;
- 20. Settlement shall be made with the Govenment at the close of each season of navigation for the price of the wood cut up to that time, and a correct account of all wood cut by the Grantees shall be kept in the Books of the Grantees in such manner as the regulations made, or to be made, shall provide, and to which the officers of the Crown shall at all times be entitled to access, and returns shall from

time to time be made under oath by the Grantees to the Crown of the quantities cut as the Crown or as regulations as aforesaid may require;

- 21. In the Event of the Failure on the part of the Grantees to erect the said pulp and paper mills and expend the moneys thereon hereinbefore stated, or in default of the said Grantees keeping the said pulp and paper mills running after the erection thereof, and keeping the required number of men employed as aforesaid, the Government may refuse to permit the continuance of the cutting of the said wood:
- 22. THE GRANTEES COVENANT with His Majesty that they shall and will not at any time or in any place deposit, empty, run or turn into or permit to be placed, deposited, emptied, run or turned into any river, stream or other waters whatsoever, refuse, sawdust, chemicals or matter of any other kind which will have the effect of destroying, harming, or driving away the fish in such river, stream or water;
- 23. THE LESSEES SHALL BE ENTITLED to a lease upon the usual terms of the water powers of Iroquois and Couchiching Falls, with the right to hold and control the waters of the Abitibi Lakes for power purposes to such an extent and in such manner and subject to such conditions and stipulations as the Minister of Lands, Forests and Mines may deem expedient. All plans and specifications of works for the storage and regulation of said waters must be approved of by the said Minister, and the Crown reserves the right to erect dams and maintain works for the storage of water for power purposes upon said lands, and to regulate and control same and to charge the lessees or owners of the powers benefited thereby a fair and equitable sum for the benefits conferred by such dams and works. Said lease shall contain a provision for the development of said powers to the full extent thereby required according to plans and specifications approved of by the Hydro-Electric Power Commission, and said lease shall contain a further provision that the Temiskaming and Northern Ontario Railway Commission shall be entitled, should they so desire, to delivery of all the power that can be developed over and above the amount required for the operation of said mills to the extent of ten thousand horse power at such prices and upon such terms and conditions as the said Hydro-Electric Power Commission shall fix. Save as Aforesaid, all water powers and privileges on said territory, and the right of the Crown to raise, hold, lower and maintain the waters in the Abitibi Lakes at such height and in such condition, as may be found necessary or expedient for the development of the same, are reserved to the Crown;
- 24. The Lessees shall also be entitled to a grant upon such terms and conditions as may be imposed or determined by the Minister of Lands, Forests and Mines, of such Crown lands in the neighborhood or vicinity of Iroquois and Couchiching Falls as may be necessary or expedient for the purpose of or connected with the business to be established, maintained, conducted and carried on at Iroquois and Couchiching Falls in the said area;

25. This agreement shall be binding upon and enure to the benefit of the Grantees, their heirs, executors, administrators and assigns;

IN WITNESS WHEREOF the said Minister of Lands, Forests and Mines for the Province of Ontario, and the parties of the second part have hereunto set their hands and seals;

Signed, sealed and delivered in the presence of

(As to execution by the Minister of Lands, Forests and Mines).

(Signed) Thos. W. Gibson.

(As to execution by Shirley Ogilvie and Frank Harris Anson).

(Signed) S. A. McArthur. (Signed) G. Alfred Morris.

(Signed) J. A. McAndrew.

(Signed) W. H. HEARST,

Minister of Lands, Fores s and Mines.

(Seal)

(Signed) SHIRLEY OGILVIE (Seal)

(Signed) Frank Harris Anson, (Seal)

Appendix No. 34.

AGREEMENT FOR SALE OF TOWNSHIPS OF KENDREY AND HAGGART.

This Agreement made in duplicate this fourteenth day of June, 1912.

BETWEEN:

HIS MAJESTY, represented by the Honourable the Minister of Lands, Forests and Mines for the Province of Ontario, hereinafter called "the Government."

Of the First Part,

and

WILLIS K. JACKSON, of the City of Buffalo, in the State of New York, one of the United States of America, WILLIAM A. RUSHWORTH, of the City of Toronto, in the County of York, in the Province of Ontario, and ERNEST S. WIGLE, of the City of Windsor, in the County of Essex, in the Province of Ontario, hereinafter called "the Purchasers,"

Of the Second Part.

WITNESSETH that in consideration of the mutual covenants, promises and agreements hereinafter set forth the parties hereto have agreed with each other as follows:

- 1. Concurrently with the execution of this agreement the Purchasers will pay to the Government the sum of \$98,364.00, the receipt whereof is hereby by the Government acknowledged, which said sum of \$98,364.00 is the price or consideration paid by the Purchasers to the Government for this agreement, and is and shall be deemed to be fully earned by the Government by the execution of this agreement, and the Purchasers shall not be entitled on the termination of this agreement by forfeiture or otherwise to any repayment, drawback or relief whatsoever in respect of the said sum of \$98,364.00 or any part thereof, but have received and shall be deemed to have received full value therefor in the original execution of this agreement by the Government.
- 2. Subject always to each and all of the terms of this agreement the Government, under and by virtue of all rights or powers it thereunto enabling, doth grant, concede and confer unto and upon the purchasers the exclusive power, right, license and authority, for the purposes of and during the continuance of

this agreement, to enter into and upon those certain parcels or tracts of lands and premises hereinafter set forth and to take possession and control of the same and to clear, cultivate, occupy, use and enjoy the same. The said lands are as follows:

First: The Township of Kendrey, in the district of Sudbury, now in the new district of Temiskaming as created by 2nd George 5th, chapter 21, containing a lot area of 50,002 acres, more or less, as shown on plan of survey by Onfario Land Surveyor, J. W. Fitzgerald, dated 5th December, 1907, of record in the Department of Lands, Forests and Mines, save and excepting therefrom the following reservations:

- (a) The beds of the Mattagami and Muskego Rivers and all lakes within the Township, and all islands, islets and reefs in said lakes or rivers, together with a road allowance one chain in perpendicular width laid out along each bank of said rivers and around the shores of said lakes.
- (b) The right of way, station grounds and extra land of the National Transcontinental Railway across said Township as shown on plan of survey of said right of way dated 27th March, 1909, signed by S. N. Parent, Chairman; Hugh D. Lumsden, Chief Engineer, and A. S. Cotton, Ontario Land Surveyor, of the record in the Department of Lands, Forests and Mines.
- (c) All regular road allowances as shown on plan aforesaid by J. W. Fitzgerald, Ontario Land Surveyor.
- (d) Broken lots 24 and 26, concession 9, broken lots 24, 25 and lot 26 in concession 10, containing by admeasurement 776 acres more or less, for the purposes of development of the water power at Smooth Rock Falls on the Mattagami River.
- (e) Those portions of broken lots 25 and 26, concessions 5 and 6, subdivided into lots and streets for townsite purposes as shown on plan of survey by H. M. Anderson, Ontario Land Surveyor, dated October 7th, 1911, of record in the Department of Lands, Forests and Mines, together with all that portion of lot 25, concession 5, and broken lot 26, concession 5, east of the Mattagami River not included within such subdivision, also that part of broken lot 25, concession 6, and that portion of broken lot 26, concession 6, lying east of the Mattagami River and not included in such subdivision, containing by admeasurement an area of 404 acres more or less.
- (f) Reserving also the right over a strip of land 100 feet wide in any and all parts of the Township for the purpose of constructing a pole or pipe line to transmit electricity or power.

Second: The Township of Haggart, in the district of Sudbury, now in the new district of Temiskaming as created by 2nd George 5th, chapter 21, containing a lot area of 49,860 acres, more or less, as shown on plan of survey by Ontario Land Surveyor, J. W. Fitzgerald, dated 25th November, 1908, of record in the Department of Lands, Forests and Mines, save and excepting therefrom the following reservations:

- (a) The right of way, station grounds and extra land of the National Transcontinental Railway across said Township as shown on plan of survey of said right of way dated 27th March, 1909, signed S. N. Parent, Chairman; Hugh D. Lumsden, Chief Engineer, and A. S. Cotton, Ontario Land Surveyor, of record in the Department of Lands, Forests and Mines.
- (b) The bed of the Muskego and Poplar Rapids Rivers, also the bed of Departure Lake and all other lakes within the township, and all islands, islets

and reefs in said lakes or rivers, together with a road allowance one chain in perpendicular width laid out on each bank of the said rivers and around the shores of the said lakes.

- (c) All regular road allowances as shown on the plan aforesaid by J. W. Fitzgerald, Ontario Land Surveyor.
- (d) Reserving also the right over a strip of land 100 feet wide in any and all parts of the township for the purpose of constructing a pole or pipe line to transmit electricity or power.
- 3. The purchasers will forthwith proceed to settle and colonize the said lands with bona fide occupant farmers and settlers, such settlement and colonization to be effected with all reasonable despatch. And, without limiting the generality of the above obligation, the purchasers guarantee that within two years from the date hereof they will cause at least two thousand four hundred acres of the said lands to be occupied and settled by at least sixteen bona fide farmers or settlers, and that during each succeeding period of one year thereafter, for a period of nineteen years, they will cause at least two thousand four hundred additional acres of the said lands to be occupied and settled by at least sixteen additional bona fide farmers and settlers. Such farmers and settlers to be such and the occupation and settlement work by them to be such as to satisfy requirements similar to the present requirements in like case of the Free Grant and Homestead Act and the regulations thereunder. In computing the number of farmers and settlers occupying and settling and the acreage occupied and settled by them from year to year as aforesaid any excess or deficiency of numbers or acreage in any year shall be carried forward to the credit or debit, as the case may be of the year following, and so from year to year, and where in the case of any farmer or settler previously credited his occupation and settlement subsequently fails to be such as to satisfy the provisions of this clause the deficiency so arising in numbers and acreage shall be forthwith chargeable against the year then current and succeeding years. Provided always that the purchasers shall not be deemed to be in default under the terms of this clause, so far as relating to specific numbers and acreage guaranteed from year to year, unless and until the deficiency in question has failed to be rectified in subsequent balances within at least two years, but this proviso shall not apply to any failure to meet the obligations of this clause as regards at least five settlers and a proportionate acreage in the first period of two years or as regards at least five settlers and a proportionate acreage in the second period of one year.
- 4. If and as requested by the Minister of Lands, Forests and Mines for the Province of Ontario, hereafter in this agreement referred to as the Minister, the purchasers will improve portions of the said lands as farms, in each case by clearing and preparing for cultivation such area thereof as the Minister may designate, not exceeding twenty-five acres, and by building a house and barn thereon of such size and character as the Minister may prescribe, not exceeding in cost one thousand dollars, and by digging a well or otherwise as the Minister may prescribe, and shall offer such farms for sale at prices and upon terms to be approved of by the Minister.
- 5. The purchasers will at their own expense, as directed by, in a manner approved of by and to the satisfaction of the Minister, construct, build and for a reasonable period maintain all roads, bridges or other road improvements in the said Townships of Kendrey and Haggart, as such construction, building and maintenance may from time to time be required in the interest of said settlers.

- 6. The purchasers will undertake that proper and adequate provision is made, to the satisfaction of the Minister, for the institution of public schools in the said Townships and for the erection of suitable school buildings. Provided always that such schools shall be entitled to the usual Government and Municipal aid and support.
- 7. In order to facilitate the colonization and settlement of the said lands, the purchasers will erect thereon a hotel, store building, housing for accommodation and other buildings or works necessary to meet requirements in advance of town or village settlements and will also erect, construct and equip thereon a permanent saw-mill, planing-mill and lath-mill, the buildings and works in this clause mentioned to be undertaken and commenced within ninety days from the date of this agreement, and to be completed within twelve months from the date of this agreement, and at least \$70,000 to be expended on such buildings and works.
- 8. The purchasers shall cut the timber from the said lands in blocks or areas of not less than eighteen hundred acres at one time, the location of such blocks or areas to be first approved by the Minister. The lands so cut over shall be properly cleared in a good and workmanlike manner and to the satisfaction of the Minister, and the timber is not to be specially selected but the cutting is to be done out of a face. Provided always that not less than twenty acres of timber must be left for each farm as a wood lot. No land shall be cut over in advance of settlement except to an extent limited until the expiry of five years from the date hereof to fifteen thousand acres, such limit to be increased each year thereafter by two thousand acres until a limit of forty-five thousand acres has been reached. All timber cut from the said lands, other than timber which in the opinion of the Minister is useful for pulp only, shall be manufactured in the mills of the purchasers and disposed of within the said townships or locally to the satisfaction of the Minister or otherwise to the satisfaction of the Minister. No pulp wood cut from the said lands shall be exported from Canada, without the permission of the Minister.
- 9. The purchasers will purchase from said settlers, on reasonable terms, any timber on the lands settled by them and will also give said settlers the preference for their teams and labour in cutting and removing timber from their lands and also in cutting and removing timber from the other lands of the purchasers.
- 10. All sales of land by the purchasers to settlers, all agreements between the purchasers and any settler or settlers and all regulations by the purchasers affecting any settler or settlers shall before becoming effective be submitted to and receive the approval of the Minister. Provided always that the Minister, in considering, pursuant to this clause or to clause 4 of this agreement, the prices sought by the purchasers to be placed upon the said lands from time to time, shall have regard to the fair market value of the said lands in view of the enhancement of such value brought about by reason of the colonization and improvement of the locality through the efforts of the purchasers.
- 11. The purchasers shall not issue or publish any prospectus, advertisement or other publication respecting the said lands or the settlement of the same, until such prospectus, advertisement or publication has been submitted to and approved by the Minister.
- 12. The purchasers shall not lay out any townsite or sites on the said lands except with the approval of and in a manner and upon terms and conditions satisfactory to the Minister.
 - 13. As and when the purchasers shall from time to time cause parcels of

the said lands, not exceeding in each case one hundred and fifty acres, more or less, to be occupied and settled in such manner, as regards qualifications of occupant and character, continuity and duration of occupancy and settlement work, as to satisfy requirements similar to the present requirements in like case of the Free Grant and Homesteads Act and the regulations thereunder, the Government shall, on the application of the purchasers, issue a Patent for the parcel in question to the settler in question, or, where there remains unperformed or only partly performed some obligation by such settler to the purchasers, to the purchasers in trust to convey the same to such settler on the performance of such obligation, or otherwise upon such terms for the due securing of the rights both of the purchasers and of such settlers as the Minister shall determine. Provided always that the Minister may in any case, in which in his opinion such a course is desirable, issue the Patent to the settler in question upon his own application and with or without the imposition of terms in favour of the purchasers.

- 14. The Government will also grant to the purchasers Patents for such portions of the said lands as shall in the opinion of the Minister be reasonably necessary for or in connection with hotel site, store sites, mill sites or other building sites required for the purposes of the undertaking, such Patents to issue in each case on the completion of the building in question.
- 15. Notwithstanding anything in this agreement contained all mines, minera's and mining rights in, on or under the said lands, and, subject to the exceptions similar to those allowed by the terms of the Free Grant and Homesteads Act and the regulations thereunder, all white pine now standing or being on the said lands are and shall be excepted and reserved to the Crown, and all Patents to be issued hereunder shall be issued subject to such exception and reservation and to all other usual exceptions, reservations and conditions.
- 16. Upon breach or default by the purchasers in carrying out any of the terms of this agreement, this agreement and all rights, benefits and advantages the purchasers thereunder shall, at the option of the Government, be notified to the purchasers in writing, forthwith cease and determine, and all interest of the purchasers thereunder or in or to the said lands shall forthwith revert to and re-vest in the Government, and in such case the purchasers shall not be entitled to the return of the price paid as hereinbefore set forth as consideration for this agreement or any portion thereof, nor to reimbursement for any sums expended by the purchasers under the terms of this agreement or for improvements on the said lands or otherwise, nor to any compensation or damages whatsoever. Provided always that the interests of bona fide settlers in occupation of any portion of the said lands prior to the date of such termination shall be protected by the Government in such manner as the Minister shall reasonably determine. Provided further that the title of lands for which Patents have issued shall not be affected by such termination. Provided further that before the Government shall have the right to determine this agreement as aforesaid the Government shall give to the purchasers at least six months' notice in writing stating the nature of the default in question and the purchasers shall have failed within such six months to remedy said default.
 - 17. Time shall be of the essence of this agreement.
- 18. All notices to be given to the purchasers under the terms of this agreement shall be deemed to be sufficiently given if mailed postage prepaid and registered and addressed to Jackson and Tindle, Buffalo, New York State.
 - 19. No waiver by the Government of any default by the purchasers under

the terms of this agreement shall be deemed to operate as a waiver of any other default thereunder or of any other matter or thing therein contained.

- 20. All questions arising between the Government and the purchasers under the terms of this agreement or as to the true construction thereof or as to true extent of the obligations of the Purchasers or of the Government to each other thereunder or otherwise shall be subject to the award, order and determination of the Minister, whose decision shall be final and conclusive as between the parties hereto.
- 21. No assignment of this agreement by the purchasers shall be valid unless and until the same is approved and counter-signed by the Minister.
- 22. This agreement shall respectively enure to the benefit of and be binding upon the respective heirs, executors, administrators and successors of the parties hereto.

IN WITNESS WHEREOF the parties hereto have hereunto set their respective hands and seals the day and year first above written.

Signed, sealed and delivered in the presence of

As to the signatures of Willis R

As to the signatures of Willis Jackson and Wm. A. Rushworth.
(Signed) Aubrey White,

(Signed) CARROLL C. HELE, as to signature of W. H. HEARST. as to signature of E. S. WIGLE, (Signed) W. T. PIGGOTT. (Signed) W. H. HEARST.

(Signed) WILLIS K. JACKSON.

(Signed) Wm. A. Rushworth.

(Signed) ERNEST S. WIGLE.

Appendix No. 35.

Instructions to J. F. Whitson.

(Under 2, Geo. V., Chap 2.)

Toronto, 23rd May, 1912.

Mr. J. F. Whitson, O.L.S., Surveys Branch, Toronto.

SIR,—Under directions of the Hon. the Minister of Lands. Forests and Mines, I have to instruct you to proceed with as little delay as possible, to carry out the following instructions:—

Under 2 Geo. V., Chap. 2, the Lieut.-Governor in Council is authorized to raise, by way of loan, the sum of money not exceeding \$5,000,000; part of which

is to be expended in Northern Ontario in the making of roads.

As you are familiar with that part of Northern Ontario, in which it is desirable that roads be constructed this year, more particularly in the clay belt along the line of the Transcontinental Railway, and in the agricultural section north of

Lake Temiskaming, in the vicinity of the Temiskaming and Northern Ontario Railway; the Minister has seen fit to place you in charge of the work until further advised.

Having discussed very fully with the Minister the roads it is considered advisable to construct this season—which rads have been outlined and shown in red on a plan hereto attached—you will, as far as it is practicable, construct these roads, extending along the T. C. Ry. from the Quebec boundary, west to the town of Hearst, and as far south along the line of the T. & N. O. Railway as Englehart or thereabouts.

You are expected to conduct and carry on the work along lines effectively used in well organized business enterprises, so as to secure the best and most economical results.

Petitions are being received from different localities all over the district, to hasten the work in this or that direction. You will, however, strictly adhere to the plan as far as it is practicable and economical, and to the policy as laid down by the Minister, when discussing these questions a few days ago.

The first roads to be constructed are where settlers are most in need of them, and where the greatest good will be done to the greatest number, conforming as closely as practicable to a definite systematic plan, after considering carefully what well be required in the early extension of the settlements, or the growth of the pulp and lumbering interests.

The plan, as outlined by the Minister, contemplates, first, the construction of main high-ways or trunk roads, leading into the larger centres, railway stations, villages or towns, from the best agricultural areas, where roads have not yet been constructed; with a view to opening up for settlement new territory.

Secondly, the connecting up of all the main highways or partly constructed roads in the sections sparsely settled. The main trunk roads should, as far as practicable in the 9 mile townships along the T. C. Ry., be constructed along the right of way, so that later on they will serve to connect up the different side roads or concession roads that have been or may hereafter be constructed, either by the Government or by the municipalities.

Main highways will be required to be constructed along the outer boundaries of the different townships through which the railway passes, or in the immediate vicinity thereof, extending back therefrom from 8 to 12 miles. North and south roads should be constructed through the centre of the townships and east and west roads across the township along the centre concession line.

Where you find, after carefully examining these projected roads that—owing to the character of the country from an agricultural standpoint, or the physical features, (such as hills, valleys or swamps), or to the difficulty in procuring suitable crossings on the railway—it would be more practicable, and more in the interests of the public to construct these roads on the next side-road or concession road, you are at liberty to do so; remembering, however, that in the event of any material change from the projected plan of the Minister's system of roads to be constructed, is found necessary or expedient, you will advise the Department before proceeding with the work; so that your proposed changes may be considered, and if found satisfactory, they may be approved of.

In the 6 mile townships along the line of the T. & N. O. Railway, you will first construct roads along the outer boundaries of the townships, and only in cases where it is found more necessary, and in the public interest, will you construct interior roads.

It is considered advisable to construct a main trunk road connecting the most important stations on the T. & N. O. Railway, so as to link up the different side-roads and concession roads constructed or which may hereafter be constructed in the interior of the townships; thereby giving to the settlers access to the railway stations.

As settlement will first take place around the railroad centres and where land is best suited for agricultural purposes, you will commence your operations in or around these centres. As you are aware, there are certain sections of the clay belt better adapted for agricultural purposes than others. Before commencing operations in any particular section, you will consult well the field notes and reports of the different surveys which have been made, and will make a personal examination of the ground, so as to be able to verify those reports.

The agricultural lands along the T. C. Ry. extend over a very large area. Only the best sections will at first be opened up for settlement; and in those sections it is desirable that roads should first be constructed; so that there will be no unnecessary expenditure of public funds in the construction of roads through sections which may not be desirable for settlement in the near future.

To assist you in examining these localities, it will be necessary to employ capable men, in whom you have every confidence.

It is considered advisable to cut out the roads where practicable the full width of 66 feet, more particularly in those portions of the country where the land is comparatively level, and covered with a thick growth of timber; so that the roads can be properly drained.

The timber cut on the road allowance must not be fallen off the right of way, but should be carefully piled so as to reduce to a minimum the danger of fire spreading. Every man in your employment should be advised as to the necessity for care in the use of fire, and every precaution must be taken when burning off the debris, so that no damage is done to the forests adjacent to the roads, or to settlers' improvements.

The roads should be well drained and graded in a proper workmanlike manner. The character of the roads will depend in a measure upon the amount of traffic that will be likely to pass over them in the near future. The foundations of the roads, however, should be so constructed that permanent roads may, when required, be constructed thereon.

You will keep a strict account of all moneys paid out in connection with the work, taking the necessary receipts or vouchers therefor. Your accounts should be so kept that at any time when called upon, you can give the cost of each road. The receipts or vouchers, you will forward to this Department periodically; and will from time to time forward a statement of the total amount expended to date so that the Department will be enabled to keep an exact check on your expenditures.

Whenever you require advances to carry on the work, you will forward to this Department the necessary requisition.

You will require a thoroughly competent and reliable bookkeeper, to keep the accounts in proper shape; and such a man will be selected as soon as you have commenced operations.

When in the progress of your work you find any localities where settlers have gone in, and have no communication by roads outside the localities mapped out, you will notify this Department as to the number of the settlers, the necessity for roads, etc., so that the matter may be considered.

You will engage the necessary laborers, teams, engineers and clerical staff, paying them at the current rate of wages paid in the locality of the work. Where settlers can be secured in the vicinity of the work, and are capable and willing to perform the kind of work required, you will in every instance engage them.

In the employment of men, you will make no distinction, as the Department will require of every man employed a day's work for a day's pay; merit being the sole consideration in the payment of wages. Before hiring your inspectors, foremen or timekeepers, you will make diligent enquiry, and ascertain that they are capable and trustworthy. The duty of selecting your men devolves upon yourself, and you will be held responsible for the results of their labour.

You will purchase the necessary supplies, camp equipage, tools and road; machinery, where you can secure the best value for the amount expended. You will keep yourself posted on the market prices of supplies, etc., required on your work. You will see that your camp equipage, tools, machinery, etc., is properly looked after; and that there be no waste of provisions around your different camps.

Where you have found by experience that a certain class of work can be performed cheaper by contract than by day labour, you will be at liberty to let small contracts, after making careful examination and estimates.

You will report from time to time on the progress of your work; and if you are at any time in doubt as to the advisability of constructing certain roads, you will apply to this Department for instructions.

You will, where necessary, engage proper office accommodation, and will construct such buildings as are necessary for the protection and storing of your camp outfits, provisions, tools and machinery.

Yours truly,

(Sgd.) AUBREY WHITE,

Deputy Minister of Lands and Forests.

Appendix No. 36.

REPORT ON THE CONSTRUCTION OF ROADS IN NORTHERN ONTARIO, UNDER THE PROVISIONS OF 2 GEO. V., CHAP. 2.

TO THE HON. W. H. HEARST,

Minister of Lands, Forests and Mines, Ontario.

SIR,—I have the honour to submit my report of the work done under the Northern Development Branch of the Department of Lands, Forests and Mines. on the Construction of Roads in Northern Ontario, under the provisions of 2 Geo. V., Chap. 2.

Under instructions, dated the 23rd of May. 1912, I proceeded to the town of Cochrane at the junction of the National Transcontinental Railway and the Temiskaming and Northern Ontario Railway.

After making a personal examination of the townships in the vicinity of Cochrane, I travelled over the different side-lines and concession lines along which it was proposed, in my instructions, roads should be built, if no engineering difficulties were met with and the land was found suitable for settlement. I com-

menced the construction of my first road on the boundary between the Townships of Glackmeyer and Lamarche, east and west from the town of Cochrane; which road will form the main highway running east to the Abitibi River and the Quebec boundary, and west to the Frederickhouse River, or to the town of Hearst, the first divisional point on the National Transcontinental Railway west of Cochrane, and distant therefrom 130 miles.

I had some difficulty at first in procuring the required number of labourers, as nearly all the available men in that part of the country were otherwise engaged on railroad construction work, and the settlers were occupied in clearing their lands. About the 20th of June I succeeded in securing 50 men, and began operations; and from that time on I had no great difficulty in securing the number of men I required. By the end of September I had 650 men on the work.

The operations of the season of 1912 extended east in townships already surveyed along the National Transcontinental Railway from the town of Cochrane to the Inter-Provincial boundary, a distance of 72 miles; and west in places along the railway as far as the town plot of Hearst, at the junction of the National Transcontinental Railway and the Algoma Central Railway; and southerly in the Townships along the Temiskaming and Northern Ontario Railway from the town of Cochrane to the town of Englehart, a distance of 115 miles.

The roads constructed in the large or nine-mile townships along the National Transcontinental Railway were along the outer boundaries of the townships, and north and south through the centre; and east and west across the centre, where it was at all practicable to follow those lines. In the smaller, or six-mile townships along the Temiskaming and Northern Ontario Railway, the work was confined in most instances to the outer boundaries of the townships only, except where the physical features of the country made it impracticable to follow these boundaries. In such cases, the most suitable lines were selected in the interior of the township.

In order to give settlers along the Temiskaming and Northern Ontario Railway access to the different stations thereon, it was found necessary to construct a trunk road along the right of way, to connect up the different sideroads and concession roads which had already been constructed by the Department of Public Works during the last few years, in the townships adjacent to the railway. This trunk road was begun near the town of Matheson and extended north and south for a distance of 25 miles. Besides this trunk road, roads were constructed along the boundaries of several of the townships; and in some instances, where it was found impracticable to use the boundaries, interior roads were constructed in lieu thereof.

In the vicinity of Cochrane roads were constructed along the outer boundaries of the different townships along the National Transcontinental Railway for a distance of over 20 miles west of Cochrane, and 12 miles east, and extending 12 miles north of the railway and over 6 miles south. These townships were divided by roads running north and south through the centre, and east and west across the centre.

A trunk road was also commenced on the National Transcontinental Railway, near the Quebec boundary, through a large area of first class agricultural land, contiguous to a settlement already begun in the Province of Quebec.

At the town of Hearst, a trunk road was begun, running west from the town to the Algoma Central Ontario Railway, which will form part of the main trunk

road, and east along the right of way of the National Transcontinental Railway, to open up a fine agricultural section contiguous to the town of Hearst.

The continuous rainy weather of last season, beginning about the middle of July, made it difficult to complete the grading of many roads and it was almost impossible to burn off the timber and debris. The roads, however, were all well cut out the full width and the central portion grubbed 26 feet in width ready for grading. The timber and brush was well piled so that no difficulty will be met with next season in burning it off as soon as the weather is at all favorable.

Herein is a description of the different roads cut out and graded; the amounts expended thereon, and also a general description of the character of the country through which these roads were laid out.

The total number of miles cut out or improved during the season of 1912 is 233; of which 210 is entirely new road; and the balance 23 miles, roads which have previously been cut out or partly cut out, and were improved by grading, widening, ditching, or by the construction of crosslay thereon. 39 miles of the new road, and 11 miles of the old road has been graded, or 50 miles in all.

The work was carried on strictly in accordance with the instructions and performed as economically and expeditiously as possible, both in the employment of men and in the purchase of supplies, road machinery, etc. In the progress of the work I was assisted in every way possible by the officials of the Temiskaming and Northern Ontario Railway Commission; and along the line of the National Transcontinental Railway by the contractors, in the forwarding of supplies and men from point to point.

With reference to the country through which these roads have been constructed, I am glad to be able to report that at least 75 per cent. was found to be of a first class character, suitable for agricultural purposes; the soil chiefly clay and in some instances clay loam. Only a few rock exposures were met with and those of comparatively small area; and in only a few instances was sand or gravel met with, the largest area being crossed by the road running west from Iroquois Falls, which is an extension of the sand plain in the vicinity of Nellie Lake on the Temiskaming and Northern Ontario Railway. One of the greatest difficulties met with in the construction of these roads, more particularly along the National Transcontinental Railway, was the lack of gravel, sand, or stone for road material.

In some of the townships in which work was carried on there is very little waste land; occasionally a muskeg is met with but a great deal of land which appears at first sight to be muskeg is, after being burned over, capable of cultivation; and will, in my opinion, make first class meadow land. The land has nearly all good drainage in a northerly direction towards the small tributaries flowing north to the larger rivers, and with a reasonable amount of expenditure in drainage the proportion of cultivatable land herein mentioned can be very much increased.

On the higher land the timber is of fair size, reaching a diameter of from 12 to 20 inches. On the level land and muskegs the average diameter is from 4 to 9 inches, but is of very dense growth. The timber is chiefly spruce, balsam, Balm-of-Gilead and white birch; spruce predominating.

When travelling over the different roads I took particular notice of the quantity of timber cut, and while the timber large enough for lumber is not nearly

so great as in the country to the south of the Height of Land, the quantity suitable for pulpwood is much greater.

Attached to this report is a statement of the expenditures in connection with the above work.

I have the honour to be,

Sir,

Your obedient servant,

J. F. WHITSON,
Road Commissioner.

STATEMENT OF EXPENDITURE BY THE NORTHERN DEVELOPMENT BRANCH ON ROAD CONSTRUCTION UP TO 31st JANUARY, 1913.

Wages of workmen	\$112,155	76
Amount paid on Road Construction under contract	32,633	64
Salaries of office staff, including assistant engineers and inspectors	7,726	48
utensils, etc.	13.035	90
Supplies, provisions, freight and express charges, etc	39,594	35
Insurance on warehouse and contents, Cochrane	380	00
Office Expenses—		
Stationery and printing\$269 35		
Travelling, railway and hotel expenses 986 64		
Postage and telegrams 97 48		
Furniture, rent of offices, equipment and incidental expenses 897 31		
	2,250	78
Medical and surgical expenses for workmen	248	05
Other expenses, made up of small accounts, livery, etc	421	35
	\$208,446	31

ARTHUR E. D. BRUCE, Secretary and Accountant.

DESCRIPTION OF ROADS CONSTRUCTED.

Road No. 1.

Commencing at the south west angle of the Township of Glackmeyer, one mile west of the town of Cochrane and three-quarters of a mile south of the National Transcontinental Railway, in the District of Temiskaming, thence east along the boundary between said township and the Townships of Lamarche and Brower, and between the Townships of Kennedy and Fox, a distance of 12 miles to the side-road between lots 18 and 19 in the Township of Kennedy.

This road cut out through a thickly timbered country the full width of 66 feet, the centre 26 feet, 13 feet on each side of the centre was well grubbed; the timber cut on the road allowance for the first $9\frac{1}{2}$ miles up to the west bank of the Abitibi River has nearly all been burnt off, and 6 miles of the road well drained and graded; $3\frac{1}{2}$ miles of it corduroyed with timber 16 feet in length; the balance of the road is now ready for grading, with the exception of the burning off of the timber, which, owing to the rainy season, it was impracticable to do.

This road passes through a good agricultural country, except in the immediate vicinity of the town of Cochrane where there is an area of low-lying ground. Every lot along this road in the Townships of Glackmeyer, Lamarche, Brower and Kennedy has been located upon and in most instances small clearings have been started.

Two wooden bridges were constructed on this road across Brower Creek on Lot 11, and one across a small stream on Lot 26, Concession 1, Glackmeyer. The Abitibi River, which crosses the road on Lot 27, Concession 1, Kennedy, has a width of 400 feet and over 14 feet deep with elay banks over 50 feet high on the east side. It will be an expensive matter to construct an iron bridge at this point, but a ferry will answer the purpose for some time to come until the country is more thickly settled.

There is no waste land along this road; no rock, sand, or gravel to be found, the soil is rich clay loam. This road will serve as a main trunk road into Cochrane for the eastern townships along the railway. \$14,700 was expended on this road.

Road No. 2.

Commencing at the south west angle of the Township of Glackmeyer, thence west along the boundary between the Townships of Clute and Fournier, as far as the north west angle of the latter, a distance of 6 miles, crossing the Frederickhouse River on Lot 10, Concession 1, Clute (where it has a width of 175 feet with clay banks 45 feet high and a swift current).

The road has been cut out the full width of 66 feet and grubbed 13 feet on each side of the centre line, and is now ready for grading, although part of the timber could not be burned off owing to the wet season.

The road passes through a good agricultural country. The land has all been located on either side, and in most instances, small clearings have been started. This road is a continuation of Trunk Road No. 1, and connects the Abitibi and Frederickhouse Rivers, the distance between them being 12½ miles. No difficulty will be found in draining the land between these two rivers; the country has a good fall, either to the Frederickhouse or to the Abitibi Rivers.

On this road \$3.800 was expended.

8 L.M.

Road No. 3.

Situate on the boundary between what was formerly the Districts of Nipissing and Algoma, on the line first run across the clay belt by the late O. L. S. Alexander Niven, in 1896, which line crosses the Canadian Pacific Railway three miles west of Sudbury. The distance between the Canadian Pacific Railway and the National Transcontinental Railway at this point being 174 miles north of Sudbury in latitude 49 degrees 5 minutes north.

This road was constructed in two sections; one section extending south from the National Transcontinental Railway between the Townships of Glackmeyer and Clute, and between the Townships of Lamarche and Fournier to the north west bank of the Frederickhouse River, a distance of 53/4 miles. The road was cut out the full width of 66 feet and grubbed the usual width of 26 feet; the timber burned off, the first 11/4 miles was graded, well ditched and crosslayed. The balance is now ready for grading.

There is no broken land along this road although in places, owing to lack of drainage, it was difficulty to construct the road without first crosslaying. The crosslay is of the usual width of 16 feet. The land along this road was located by settlers last season and fair progress has been made in making small clearings.

North of the right-of-way of the National Transcontinental Railway, on the continuation of the same road, three contracts were let. The first for the cutting and grading of 3¾ miles at \$1,500 per mile; the second for 4½ miles at \$1,500 per mile for cutting and burning off the timber the full width of 66 feet and grubbing out 26 feet in the centre, and properly draining and grading the road; and the third for the cutting and burning off 66 feet and grubbing the centre 26 feet of all roots ready for grading for \$650 per mile, the last covering 3 miles. The first two contracts for the cutting and grading have been nearly completed with the exception of the burning of some timber, the building of a few culverts, and the deepening of the drains in some instances. The third contract has been completed with the exception of the burning of the timber in places.

The total length of this road is 17 miles and is now suitable for traffic in the winter season, 9 miles of it being almost a completed road. The sum of \$21,253.00 was expended thereon. The contractors are expected to finish this work as soon as the weather conditions are suitable. On these contracts and on the portion south of the right-of-way which was performed by day labour, first class corduroy was laid wherever the conditions of the ground required it. The road has been well drained from the south west angle of the township of Glackmeyer, north between the said township and the township of Clute, a distance of 9 miles. The last three miles of the road, which is not yet graded, is on the boundary between the townships of Blount and Leitch.

The road, through its entire distance, 17 miles, passes through a good agricultural country. Small areas of low land were met with, and a few semi-muskegs but not a single rock or gravel bed were encountered; and from the highest point on the road, which is undulating, it is possible to view, looking either way, the road as constructed from end to end. Fair progress has been made by the settlers who located along this road in the Townships of Glackmeyer. Blount, Clute, Fournier and Lamarche.

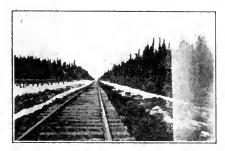
The road, when completed north a further distance of 6 miles to the north boundary of Blount and Leitch, will form the main trunk road north and south leading to the town of Cochrane for the territory lying between the Frederickhouse and Abitibi Rivers.



Transcontinental office building at Hearst.



An unfinished corduroy road through semi-muskeg land.



Looking east on the Transcontinental Railway, towards the Abitibi River, sixteen-mile tangent.



A settler's home, township of Glackmeyer, three miles north of Cochrane.



A road cut-out, south boundary of Glackmeyer.



A settler's clearing in the township of Glackmeyer.



Township of Sargent, near the Quebec boundary, showing railroad construction camps.



A new road on the old District boundary between Algoma and Nipissing, two miles west of the town of Cochrane.

Road No. 4.

This road extends east through the centre of the Township of Glackmeyer between Concessions 6 and 7, commencing on the old boundary between the Districts of Nipissing and Algoma, as described under Road No. 3, a distance of 8 miles, to the west bank of the Abitibi River on Lot 3, Glackmeyer.

Previous to my commencing work on this road, two miles had been partially cut out and about ½ mile corduroyed; which corduroy, however, during the fire of 1911 was partially destroyed. The road has been widened and graded and the crosslay that was burnt renewed, and over a mile of additional crosslay laid. The road was cut out the full width of 66 feet and grubbed the usual width of 26 feet in the centre for a distance of 5½ miles, and the balance, ½ miles, has been cut out and grubbed. Two bridges have been constructed, one at the head of Lillabelle Lake on Lot 24, and one across Brule Creek on Lot 12 The ungraded portion is in good condition for winter travel. The portion graded has been well drained.

The land along this road is first class, well timbered; the soil, a clay or clay loam; every lot has been settled upon and in several instances from 10 to 30 acres cleared. Very little waste land was met with.

\$8,800 was expended on this road.

Road No. 5.

Constructed west across the centre of the Townships of Clute and Calder, between Concessions 6 and 7, a distance of 18 miles. The first 23/4 miles west to the east bank of the Frederickhouse River has been well graded and ditched, although in some places the timber still requires to be burned off. This portion was performed under contract by E. Pauze at \$1,500 per mile. The work has not yet been taken off the contractor's hands, as in some places it was found on examination that the drainage is not complete. This will be completed by the contractor as soon as the weather conditions are favorable.

\$3,800 has been advanced on this contract.

Crossing to the west bank of the Frederickhouse River the road was continued west along the centre line of the townships to the road allowance between Lots 12 and 13 in the Township of Calder, a distance of 10½ miles. It was cut out the full width of 66 feet, the centre part 26 feet well grubbed, and with the exception of the burning of the timber, is now ready for grading. Part of it has been crosslayed and several culverts constructed. This work was performed by day labor at a cost of \$600 per mile or \$6,150.

Still continuing west on this road from the side-road between Lots 12 and 13, a contract was let for the cutting out of the road the full width of 66 feet and the grubbing of the centre portion 26 feet to the west boundary of the township, a further distance of 5 miles, at \$650 per mile. The cutting and grubbing, and part of the burning off has been done, and \$2,750 paid on account of the contract, leaving a balance of \$500 still to be paid as soon as the timber is burned off. The total amount expended on the three sections of road No. 5 being \$12,700.

This road across both the townships of Clute and Calder passes through a good agricultural country; no rock exposures, sand or gravel were encountered. A few semi-muskegs were met with and no land not capable of being thoroughly drained at a reasonable cost. The chief timber found is spruce up to 16 inches,





Winter view of roads cut out through semi-muskeg, Township of Glackmeyer.



Burning off the right of way on the trunk road west of Cochrane.



A road camp, Township of Glackmeyer.



The first theatre in Hearst.



Township of Lamarche.

Balm-of-Gilead and poplar up to 18 inches in diameter, and some small white birch. Through the Township of Calder several small settlers' clearings were met with. The Township of Clute is well drained by the Frederickhouse River and its tributaries the Buskegow and Deception Creeks; a small saw-mill is located on the Buskegow Creek on the line between Lots 12 and 13. The western part of Calder Township is well drained by the Driftwood River and numerous small streams flowing into it.

This trunk road as now cut out and partly graded across the centre of the Townships of Glackmeyer, Clute and Calder has a total length of 263/4 miles, of which 18 miles are through the Townships of Clute and Calder. The National Transcontinental Railway crosses these townships from east to west.

Road No. 6.

A north and south road through the centre of the Township of Calder was constructed, 9 miles in length, between Lots 12 and 13. A contract was let for the cutting and burning off the timber on the road 66 feet wide, and grubbing the centre 26 feet, to A. Allard at \$650 per mile. The road has been cut out the full width of 66 feet and well grubbed 26 feet in the centre, and part of the timber burned off. With the exception of the burning of the balance of the timber the road is now ready for grading. \$4,950 has been paid on account of this contract. The burning of the remaining timber will be done as soon as the weather is favorable.

The road passes through a good section of agricultural land gently undulating, with here and there a few small areas of semi-muskeg land.

Road No. 7.

A road on the boundary between the Townships of Clute and Calder was cut out across the 1st to the 10th Concessions inclusive, a distance of 7½ miles and a bridge built across Deception Creek on Concession 5, and considerable corduroy laid. This road was cut out the full width of 66 feet and grubbed the usual width of 26 feet, although very little burning of the timber has yet been done.

The road passes through a very fine farming country; very little broken land; no stone, sand or gravel was met with, and the land thickly timbered with spruce, balsam, Balm-of-Gilead, white birch and poplar. Settlers who located along this road early last spring have made fair progress in the performance of their settlement duties. Every lot has been located, some of the settlers having packed in their household effects along the blazed trial before the road was cut out. The same remarks will apply to several settlers along the centre line east and west through Clute.

This work was performed by day labor at an average cost of \$525 per mile, including the construction of a bridge across Deception Creek and the laying of considerable corduroy in places.

\$3,950 has been expended on this road.

Road No. 8.

A road was constructed between Lots 18 and 19 across Concessions 1 to 12 inclusive, through the Township of Clute a distance of 9 miles. The road was cut out the full width—66 feet—grubbed the usual width—26 feet—in the centre and



A road camp in settler's clearing near the Abitibi River, Township of Brower, showing poplar, white birch and spruce timber.



A field of oats on the Experimental Farm on the T. & N. O. Ry., Township of Clergue.

the timber partly burned off, south of the railway. This work was performed by day labor at an approximate cost of \$630 per mile. The road crosses the Buskegow Creek in the 5th Concession where the river has a width of about 75 feet with high clay banks.

There is very little waste land along this road, although, in a few places, semi-muskegs are met with. The general character of the country, however, is rolling; the soil is a rich clay loam; the timber of the usual character, spruce predominating with poplar, Balm-of-Gilead and white birch on the high land. The lots along this road are all located and in many instances fair progress has been made by the settlers in making small clearings.

\$5,650 was expended on this road.

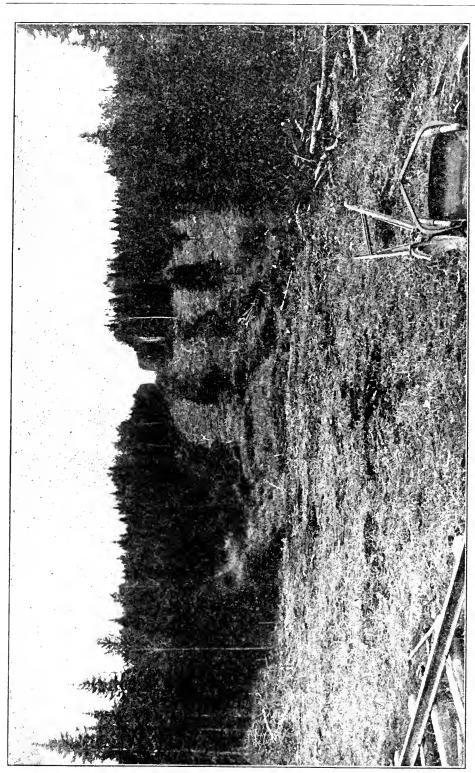
Road No. 9.

Returning again to the Township of Glackmeyer, a road between Lots 18 and 19 across Concession 1, was cut out the full width and well graded. The balance of this road across Concessions 2 to 12 inclusive was cut out 3 years ago by the Department of Public Works, and partly graded as far as the line between Concessions 6 and 7. Across part of Concessions 9 and 10 the road was graded last season by the Department of Public Works. On the 2nd, 3rd and 4th Concessions there are two large semi-muskegs, one of them about ½ a mile in length which had not been corduroyed, but ditched; the other one, about ¾ a mile in length had been well corduroyed but not ditched. I corduroyed the first mentioned one and deepened the ditches, and ditched the other on both sides, and re-graded and ditched parts of the balance of the road up to the 12th Concession inclusive, but owing to the wet season could not complete the work across the 12th Concession. I also cut down several steep hills on this road expending \$4,400 thereon up to the north boundary of Glackmeyer.

The land along this road was the first located upon in the vicinity of Cochrane, and, with the exception of the semi-muskegs above mentioned, the land is fairly good; the soil a clay or clay loam with the exception of one sand hill. Almost every lot is settled upon; in a few instances from 20 to 40 acres have been cleared on individual lots with fairly good buildings. There are two sawmills on this road, one in the 2nd Concession and one in the 10th.

This road has also been continued north as far as the Abitibi River across Concessions 1 and 2, Township of Blount, a distance of 1½ miles. The work was performed under contract for the cutting out, grubbing and burning at \$650 per mile. \$337.50 has already been advanced; the work has not yet been completed; it has been cut out and grubbed in the usual way but not burned off.

This road passes through a very fine country. Several years ago fire swept over a section of country along the Abitibi River in Blount and Leitch Townships and the burning off of the moss, which retains the moisture and retards drainage, has materially improved the country from an agricultural stand point. The road intersects the Abitibi River near the centre of the Long Soo Rapids, where the river is about 40 rods in width and very rapid, and it will be practically impossible, except at a very great expense, to construct a bridge at this point. An easier crossing can be made about ½ a mile down the stream where the river narrows down to about half its average width.



Cutting out a trunk road east from the town of Cochrane to the Abitibi River.

Road No. 10.

The boundary between the Townships of Glackmeyer and Blount, across part of Lot 15 and across Lots 16 to 28 inclusive, a distance of $4\frac{1}{2}$ miles, has been cut out the usual width of 66 feet and the centre 26 feet grubbed; the timber has not, however, been burned off. The eastern mile was let by contract to E. Pauze at \$650 per mile for the cutting, grubbing and burning. \$300 has been advanced on his contract. A contract for the balance of the road across Lots 19 to 28 was let to F. Nault for cutting, grubbing and burning at \$650 per mile. Mr. Nault has completed his contract with the exception of burning off the timber and has been paid \$1,787.50 on account.

The land along this road is very fine, well drained by the Abitibi River and small tributary streams. There are several settlers located along this road who have started small clearings.

Road No. 11.

The road between Lots 12 and 13 across the 1st to the 6th Concession in the Township of Glackmeyer, a distance of 4½ miles, has been cut out the full width—66 feet—grubbed the usual width but not yet burned off. Two bridges across the Brule or Brower Creek on Concession 2 have been constructed and considerable corduroy laid.

The amount expended on this road is \$3,664.34.

There is no broken or waste land along this road although part of it is flat and will require considerable ditching.

Road No. 12.

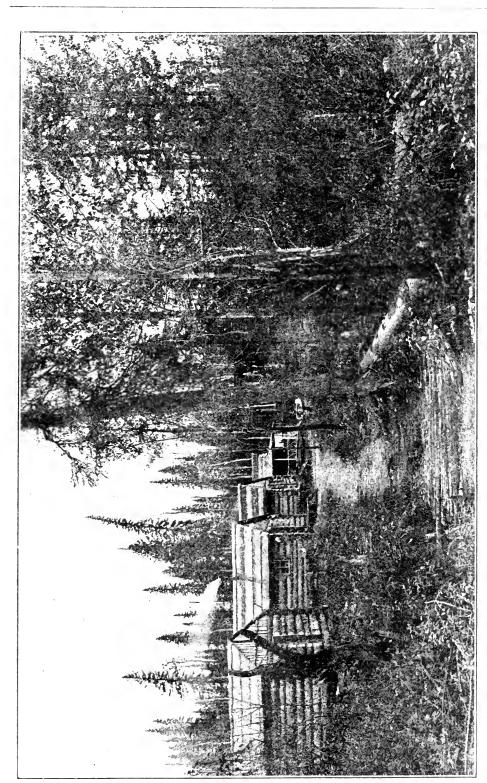
The road between Lots 24 and 25 across Concessions 1, 2 and 3 in the Township of Kennedy has been cut out the full width, grubbed and ready for grading, with the exception of the burning of the timber. It was found impracticable to construct the road along the boundary line between the Townships of Kennedy and Glackmeyer across these three Concessions, inasmuch as an expensive bridge would be required across the Abitibi River on Concession 3. It is proposed to extend this road 34 of a mile further north and then jog west on the line between Concessions 4 and 5 to the boundary, thence north along the boundary. This road, which has a length of 21/4 miles, was cut out and grubbed at a cost of \$1,525.00.

The road passes through a good agricultural country.

Road No. 13.

The road between Lots 8 and 9 in the Township of Lamarche, across Concessions 2 to 6 inclusive, a distance of 5 miles, has been cut out the usual width and grubbed. Across Concession 6 for one mile the road has been well graded and well ditched, and a bridge constructed across Lamarche Creek on Concession 4. A large drain was constructed on each side of the road across the 6th Concession through a large spruce and tamarac swamp. These ditches will serve to drain the town of Cochrane and a large area surrounding it. The land in part of the 6th Concession is very swampy, with, however, sufficient fall for good drainage. The balance of the road is through fairly good agricultural land until the 1st Concession is met where the land is again swampy. Every lot on this road has been located on and fair progress is being made by the locaters.

On this road there was expended \$4,450.



Resident Engineers' camps on the T. C. R. at Nagagami River, 172 miles west of the town of Cochrane,

Road No. 14.

A road along the boundary between the Townships of Brower and Lamarche across Concessions 2 to 6 inclusive, a distance of 5 miles, was cut out and grubbed in the usual way and the northern mile burned off. A bridge was constructed across Brule Creek in the 6th Concession.

This road passes through a good agricultural section; the soil a clay or clay loam; well timbered with spruce, Balm-of-Gilead, white birch and poplar. Several settlers have already commenced clearing land along this road and a small saw mill is in operation on the 4th Concession. It crosses both the National Transcontinental Railway and the Temiskaming and Northern Ontario Railway.

On this road \$3,850 was expended.

Road No. 15.

Townships of Fox and Brower.

A road along the boundary between the Townships of Fox and Brower was cut out the full width and well grubbed across the 1st, 2nd and part of the 3rd Concessions to the National Transcontinental Railway, a distance of about 2½ miles. It was found very difficult to construct a crossing over the National Transcontinental Railway owing to the high embankment, and it was considered advisable to construct the road between the 2nd and 3rd Concessions in the Township of Brower, a distance of 1 mile, across Lots 1 and 2, and construct the road between Lots 2 and 3 across the 3rd, 4th, 5th and 6th Concessions in the Township of Brower in lieu thereof, to the north boundary, a distance of four miles. This road will be more in the public interest and will serve a greater number of settlers and cross the railway at Brower Siding, a very suitable place for a station and a very easy crossing. These 7½ miles of road were cut out the full width and grubbed, and 2½ miles graded and ditched.

On this road \$5,200 has been expended.

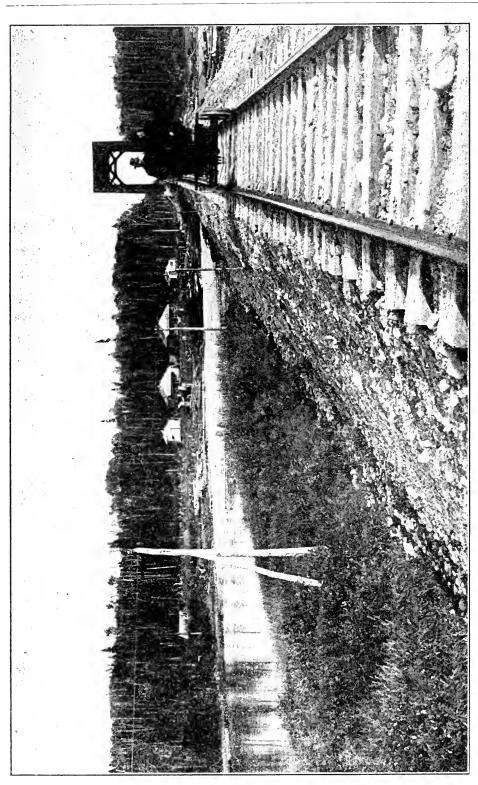
The land along this road is first class; the soil clay or clay loam and well timbered. The country along the banks of the Abitibi River is high above the bed of the stream; the clay banks of which rise to an elevation of from 20 to 75 feet.

The river has an average width of from 400 to 500 feet; the water is deep and the current swift. It is one of the largest of the many tributary streams of the Moose River and the land along the banks or in the valley is all well adapted for agricultural purposes. The timber is of the usual character common to Northern Ontario, spruce predominating, reaching from 4 inches up to 18 inches on the high land; the poplar, Balm-of-Gilead and white birch along the banks is from 6 inches to 20 inches or over in diameter. There is a small sawmill situate on the 5th Concession. The land is all located and good progress has been made; the road passes through one of the best settlements east of Cochrane.

Road No. 16.

A road was cut out along the south boundary of the Township of Fox across Lots 11 and 12, and along the south boundary of the Township of Brower and along the south boundary of the Township of Lamarche across Lots 1, 2 and 3, a distance of 8½ miles. The road was cut out the full width of 66 feet and the centre 26 feet grubbed, and is now ready for grading with the exception of the burning of the timber.

On this road \$5,200 was expended by day labour.



The easterly 4½ miles of this road passes through a good agricultural country, the land is high, the soil a good clay loam, the timber of the usual character-spruce, balsam, Balm-of-Gilead, poplar, and some white birch. The balance of the road passes through low swampy land with small spruce timber. There are no settlers along this road. The road, as cut out, will give access to settlers who may hereafter locate on the higher land on the easterly 4½ miles of the road to the Temiskaming and Northern Ontario Railway. Part of the low land, when properly drained, will make fairly good meadow land.

Road No. 17.

A trunk road was cut out along the north side of the right of way of the National Transcontinental Railway, passing through this township for a distance of 6½ miles, from Lot 14 to Lot 34 inclusive. The road was cut out the full width, and well grubbed, and is ready for grading.

On this road was expended \$4,949.43.

It is proposed to extend this road easterly to the Quebec boundary, a further distance of $4\frac{1}{2}$ miles.

This road passes through a very fine section of land; the soil is all a rich elay loam. In this township, which was surveyed last season, there is over 75 per cent. of the land suitable for agricultural purposes; and, in order to promote settlement in this township, it will be necessary to complete the road to the Quebec boundary, and to construct two roads crossing the railway at right angles, so as to give access to the lots in the rear of the township. A few hundred yards east of the Quebec boundary, in the Province of Quebec, the railway crosses the Okikodosik River, which has a width of over 150 feet, and is navigable south into the Abitibi Lakes. At this point there is a station bearing the same name as the river, and a small settlement has been started by the Quebec Government, and roads are being cut out in advance of settlement by the Government of the Province of Quebec.

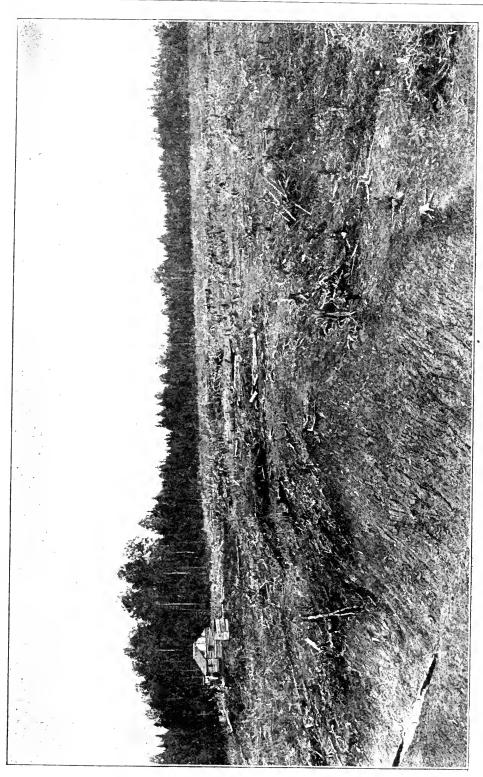
To the east of the township of Sargent, in Quebec, there is a large area of fine land similar to that in the Township of Sargent, and there is every reason to believe that on completion of the roads, settlement will take place on both sides of the Inter-Provincial boundary. Already several settlers have located in Sargent. The Quebec boundary is distant 72 miles east of the town of Cochrane.

Road No. 18.

In the neighbourhood of the town of Hearst, a divisional point of the National Transcontinental Railway, 130 miles west of Cochrane.

A main trunk road was begun near the town of Hearst and constructed west with a view to connecting the said town with the Algoma Central Ontario Railway running north from Sault Ste. Marie and Michipicoton Harbour and 160 miles north therefrom for a distance of 1½ miles. A contract was let to P. Turgeon to cut the timber on the road, burn it, and grub the centre portion 26 feet in width, at \$650 per mile. The road is now cut out and grubbed, but part of the timber has not yet been burned off. \$625 has been paid on account of this contract. The road will be ready for grading as soon as the timber is burned off.

This trunk road was extended easterly through the town plot of Hearst along the main street which is contiguous to the southerly limit of the right of way of the National Transcontinental Railway station grounds. This road was stumped,



A settler's clearing near the town of Cochrane.

corduroyed in places, and graded for a distance of one mile, and will serve as part of the main trunk road along the line of railway between Hearst and Cochrane, which towns are 130 miles apart.

The 9th street in the town of Hearst, which intersects the railway a short distance from the station, was stumped and partly graded for a distance of a quarter of a mile, to the bank of the Mattawishquia River, or Southern boundary of the town plot. This road, when produced southerly through the township of Kendall (surveyed last season), will form part of the main trunk road projected south through the centre of the township.

On the roads in and adjacent to Hearst, in addition to the \$625 already men-

tioned, a sum of \$3,866.71 has been expended, or a total of \$4,491.71.

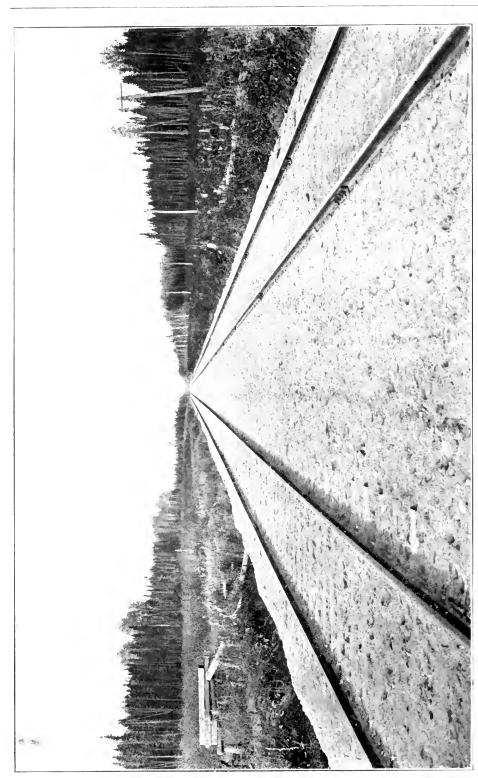
Road No. 19.

On the line of the Temiskaming and Northern Ontario Railway, 25 miles south of Cochrane, a trunk road was constructed east and west from Iroquois Falls Station, at the junction of the Porcupine Branch of the said railway, and at the junction of a branch line of the said railway now being constructed to the Pulp and Paper Mills under construction at Iroquois Falls on the Abitibi River, situate about 71/4 miles in a north-easterly direction from the station bearing the same name. The road was cut out and grubbed west of the railway along the boundary between the townships of Calvert and Clergue, and between the townships of Mc-Cart and Dundonald for a distance of about 7 miles to the Frederickhouse River; and east of the Temiskaming and Northern Ontario Railway to the Abitibi River, about 6 miles, or in all, a distance of 13 miles. This road was also connected, by a road 1/4 of a mile in length, with Iroquois Falls Station on the Temiskaming and Northern Ontario Railway. The road passes through a country heavily timbered with large spruce, Balm-of-Gilead, poplar, white birch, and balsam. The land is rolling, and in several instances east of the railway, ravines, or gullies were met with. To the west of the railway, the road passes through a sandy plain about 11/4 miles in width, which is locally known as the Nellie Lake Jack Pine District. On this road is also met a high rocky exposure about 1/4 mile in width, rising to an clevation of over 75 feet. A detour was made around the foot of this mountain to the south side. On this road, a bridge 130 feet in length was built, crossing a ravine at the end of a small lake on Lot 3. Also a bridge across a small stream on Lot 9. With the exception of the sandy plain above referred to, and the rock exposure, the land both east and west of the railway is fairly good agricultural land. few semi-muskegs were met with, and in some instances the land is low. road will require cross-laying in places, but it can all be drained at a moderate expense. Settlers have located on almost every lot in the township of Clergue, and on the 1st Concession in the Township of Calvert; also on lots in the 6th Concession of the Township of Dundonald, as far west as Lot 5.

This trunk road was constructed with a view to giving access to settlers who might hereafter locate in the townships of Little, Evelyn, and the townships to the west thereof, west of the Frederickhouse River; and also to give to settlers located in the townships of Teefy and Walker, east of the Abitibi River, access to the railway. It will be necessary to construct on the Frederickhouse River a bridge at the foot of Frederickhouse Lake. At this point, no great difficulty will be encountered in constructing a bridge; on the Abitibi River it may be practicable to construct a ferry, as the river is wide at this point.

This road was cut out the full width; the timber well piled, and the centre portion, 26 feet in width, well grubbed.

\$10,625.74 was expended on this road.



A typical view on the T. C. R. west of the town of Cochrane.

Road No. 20.

Township of Clergue.

In the Township of Clergue, on the Temiskaming and Northern Ontario Railway, south of Kelso Station a road cut out about three years ago as a winter road for mining purposes was widened from 30 feet to 66 feet, and grubbed ready for grading. This road commences at the centre of the township and runs east between Concessions 3 and 4 from Lots 7 to 12. The same road was cut out the full width east from the centre of the township across Lots 6 to 1 inclusive, and from the same point it was cut out the full width across the 3rd and 2nd Concessions, and north across part of the 4th, 5th, and part of the 6th Concessions.

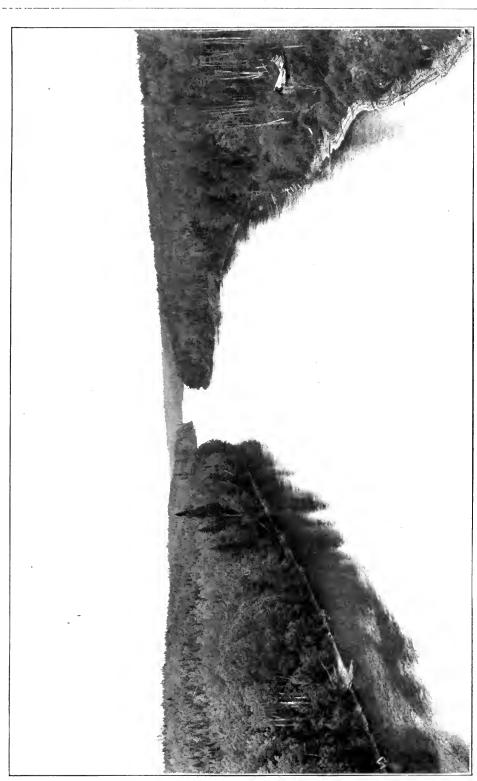
A road was also cut out the usual width, and grubbed, along the boundary between the townships of Clergue and Walker, across the 4th and part of the 5th Concessions. Half a mile of the road between Lots 6 and 7, Concession 4, was well graded and ditched. A bridge was constructed on the 5th Concession and some corduroy laid. The road between the townships of Walker and Clergue, as cut out, connects with a road cut out this season by the Department of Public Works, commencing at the Experimental Farm near Monteith. In this section, $10\frac{1}{2}$ miles of new road were cut out, and $\frac{3}{4}$ of a mile graded, at a cost of \$9,277.44.

These roads connect Kelso Station with the Experimental Farm at Monteith, and will also serve to connect the village of Kelso with the Porcupine branch of the Temiskaming and Northern Ontario Railway. The country served by these reads is very fair agricultural land. Along the Driftwood Creek it is somewhat broken and a few rocky outcrops were met with. In some places the land is low, but there is fair drainage. There is a dense growth of timber on the ground of large size; Balm-of-Gilead, poplar, white birch and spruce, the Balm-of-Gilead reaching a diameter of 24 inches. The country is rolling, with high clay banks along the creeks; the soil is a rich clay loam.

Road No. 21.

A trunk road was constructed along the Temiskaming and Northern Ontario Railway from a point north of Homer Siding, in the Township of Taylor, to a point south-east of the east boundary of the township of Playfair in the Township of Cook, which road passes through the townships of Taylor, Carr, the town of Matheson, the townships of Bowman, Hislop, and Playfair, a distance of 25 miles. This road was cut out and grubbed the usual width, and about 3 miles of it ditched and graded; 25 culverts have been constructed. The ungraded portion of the road, as soon as the dry weather sets in and the timber burned off, will be ready for grading. The road will connect all the different side-roads and Concession lines on which roads have been constructed by the Department of Public Works and others in the above-named townships, and give to the settlers access to the different stations, more particularly to the town of Matheson. The road passes through a fairly good agricultural country; in some instances it is broken by ravines and a few rock outcrops, and also a few semi-muskegs. The soil, however, is chiefly clay or clay loam, with an occasional sand and gravel ridge. Fair progress has been made by the settlers who have located on the lots in the above-mentioned townships. There are some large clearings and there is every appearance that, in the not distant future, Matheson will be the centre of a prosperous farming community.

\$12,599.90 has been expended on this road



The valley of the Abitibi River, township of Brower, near the T. C. R.

Road No. 22.

A road along the town line between the townships of Walker and Taylor was constructed from the railway east to the township of Carr, a distance of 3 miles. The read was well cut out and grubbed, but not burnt, at a cost of \$1,900. The road passes through a fairly good country, on which a fair beginning has been made by settlers.

Road No. 23.

On the town line between the townships of Taylor and Carr, a road was cut out and grubbed ready for grading, with the exception of the burning. The road is situate across the 3rd and 4th Concessions, a distance of 2 miles in length.

\$1,200 was expended on this road.

The land adjacent to this road is very fine; the soil a rich clay loam. On Lot 1, Taylor, and Lot 12, Carr, Concession 3, there are large clearings. Forty bushels of fall wheat per acre were grown on Lot 1, and, notwithstanding the backward season, ripened. Timothy, clover, and vegetables of all kinds matured, equal to any produced in Old Ontario under more favorable conditions.

Road No. 24.

The road between the townships of Bowman and Currie, across the 6th, 5th, and 4th Concessions, was cut out and grubbed in the usual way, and is now ready for grading, except the burning. The total distance is 4 miles, performed at a cost of \$2,868.16.

This road passes through a fairly good agricultural country. The road crosses the Way-tay-beg River, over which a bridge with a span of 70 feet has been constructed.

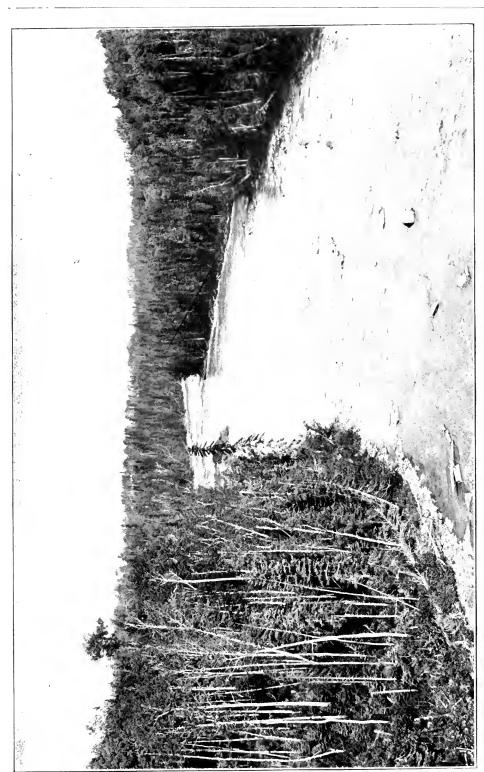
Road No. 25.

A road was constructed through the townships of Hislop and Bowman from the Temiskaming and Northern Ontario Railway south across part of the 5th, the 4th, 3rd, 2nd, and 1st Concessions, and between the townships of Hislop and Playfair across Lots 1 to 13 inclusive, a distance of 6½ miles, or in all a total distance of 11 miles: and a substantial wooden bridge with a span of 43 feet constructed across the Black River on Lot 4, south boundary of Hislop, and the approaches to the bridge cut down; 20 culverts built on the town line between Hislop and Bowman, and the road cross-laid in places. This work was done at a cost of \$9,311.23.

The road passes through a good agricultural country, part of which has, within the last seven years, been burned over and easily cleared. The country is rolling, and near the Black River and tributary streams it is broken by clay ridges and a few rock outcrops. The bridge is one of two across the Black River, the other being at Matheson, and will give access to a large section of agricultural land, east of the river, not yet settled on.

Road No. 26.

A road was built on the town line between the townships of Carr and Beatty across the 1st to 6th Concession inclusive, a distance of 6 miles. This road was well cut out and grubbed the full width, and is now ready for grading, with the



The valley of the Frederickhouse River, nine miles west of the fown of Cochrane,

exception of the burning of the timber. It passes through a fine agricultural country, with the exception of the 6th Concession and part of the 5th, where there is a narrow ridge of sand. Most of the country has been burned over, and is easily cleared. The lots are all located on, and fair progress is being made by the settlers.

The cost of this road was \$3,345.86.

Road No. 27.

The road between the townships of Beatty and Hislop, known as the Munro Road, was improved and partly graded, and 6 clay hills cut down in front of Lots 7, 8, and 9, a distance of $1\frac{1}{2}$ miles, at a cost of \$1,855.18.

This road passes through a rolling clay country broken by clay ridges; the soil is A1. The country was all swept by fire 7 years ago and easily cleared.

Road No. 28.

The Night Hawk Lake Road, on the line between the townships of Carr and Bowman was repaired and regraded from the west boundary of the town of Matheson across Lots 6 to 10 inclusive, a distance of $2\frac{1}{2}$ miles; and the corduroy around Jean Lake which had been partly burned two years ago was replaced, and several small culverts repaired.

This work was done at a cost of \$400.

This road was originally constructed by the Department of Public Works to connect Matheson, on the T. & N. O. Railway, with the mining district around Porcupine. It passes through a good section of agricultural land.

Road No. 29.

A road between the townships of Ingram and Evanturel across part of the 2nd and 1st Concessions, and the town line between the townships of Hilliard and Armstrong across the 6th and part of the 5th Concessions, a distance of two miles, was ditched and part of it corduroyed, at a cost of \$1,154.77. This road was cut out and the greater portion of it corduroyed by the Department of Public Works early last spring. The road passes through a flat country with fairly good farming land. The road was cut out to give settlers in the vicinity of Tomstown an ontlet south to Thornloe and Earlton. The ditches now constructed will assist in draining the low lying lands adjacent; there is abundance of fall.

Road No. 30.

Townships of Marter and Catherine.

A road was cut out the full width and grubbed, commencing on the line between Concessions 2 and 3 at the south-west angle of Lot 10, Marter; thence east one mile, thence north one mile, thence east one mile, to the south-east angle of Lot 7 in the 4th Concession; hence east between the 3rd and 4th Concessions across Lots 5, 4, and part of Lot 3, a distance of 1¼ miles; thence north one mile through the centre of Lot 3, Concession 4, to the line between Concessions 4 and 5; thence east 1¼ miles to the Windigo Road leading to Tomstown. These roads were all cut out the full width and well grubbed, and 2¼ miles well graded, that is the road across Lots 5, 4, and part of 3, and north along the centre line of Lot 3, Concession 4, a distance of 2¼ miles.

The road was also widened and graded between Lots 4 and 5 across part of Concession 2, Concessions 3 and 4, and part of Concession 5, a distance of 3 miles; and cut out and grubbed across part of Concession 5, Concession 6, township of Marter; and between Lots 4 and 5 across the south half of Concession 1, Township of Catherine; also cut out and grubbed along the town line between the townships of Catherine and Marter across Lots 5 and 6. This road was partly ditched on Concession 6, Marter, and two bridges or large culverts and several small ones constructed; also a bridge on Concession 5, Marter. The total length of roads cut out in the townships of Marter and Catherine is $11\frac{1}{2}$ miles.

These roads were constructed at a total cost of \$10,900.

The country through which these roads are constructed is fairly good in places, and in places is very sandy, broken by ridges, and has very little timber of value. The lots are nearly all located on and some of them well improved.

Road No. 31.

Four clay hills were cut down on either side of the Blanche River, at the approaches to the bridges crossing the said river on Lot 10, Concession 5, Evanturel, and on Lot 1, Concession 3, Township of Dack; both on main travelled roads leading into Englehart. These hills in wet weather were impassable for heavy traffic.

The cutting down of the hills on Lot 10 cost \$1,000, and those on Lot 1 cost \$992.10.

The road between the townships of Evanturel and Dack, across Concessions 3 and 4, was improved by cleaning out the ditches and repairing the culverts.

The total cost of these two works amounted to \$1,992.10.

The work was badly needed, and has since given general satisfaction.

Besides the above roads, a fireproof warehouse 24 feet by 50 feet was constructed at Cochrane at a cost of \$794.89.

To the Honourable the Minister of Lands, Forests and Mines, Ontario.

SIR,—After closing down most of the operations on the construction of roads for the season of 1912 on the 15th of November, I immediately proceeded, as directed by you, to examine the different sections of Northern Ontario where there was immediate likelihood of opening up new settlements by the construction of roads under the provisions of 2 Geo. V., Chap. 2, during the season of 1913.

District of Rainy River.

I proceeded first to the Rainy River Valley in the District of Rainy River, and drove over parts of the different roads which had already been constructed, and examined, as far as possible, the unsettled parts of the country in the valley suitable for agricultural purposes, and from my observation have made an estimate of the amount that would be required this coming season in opening up new roads and improving one main thoroughfare or trunk road from the town of Fort Frances West through the valley to the mouth of the Rainy River; and also in constructing trunk roads north and south at regular intervals, chiefly along township boundaries so as to connect up the various short roads now constructed; and also to open

up twelve new townships in which there is a large percentage of good agricultural land in which there are as yet few settlers and few existing roads.

I estimate that \$100,000 would be required in opening up 100 miles of new road, and repairing and grading 50 miles of old road.

These roads, when constructed, will allow the settlers to reach the different stations along the Canadian Northern Railway passing through the Valley.

District of Kenora.

Leaving the Rainy River Valley, I proceeded to the District of Kenora, and drove through the townships north-east, north and west of the town of Kenora and Keewatin. In these townships I found a fair percentage of agricultural land; although, speaking generally, the country is not well adapted for that purpose. Where the land is free from stone the soil is fairly good, and farming is at present being carried on in places with apparently some success. The difficulty at present, however, is that the farmers cannot get to Kenora and Keewatin with their produce, except during the winter season or during the dry seasons.

After examining the different roads which have already been opened up, I engaged a small exploration party, with a view to determining what agricultural land might be opened up by the continuation of the present colonization road west through the township of Pellatt and west towards the Manitoba Boundary; and, if possible, locate a branch road northerly to the Grand Trunk Pacific Railway; as it has been found almost impracticable, owing to the rough character of the country north or north-east of Kenora, to tap the Transcontinental Railway in that direction. I am glad to report that fair success has been met with, and my explorer reports having been able to locate a good line of road, passing through, in places, sections of good agricultural land, which will be tributary to Keewatin or Kenora. The length of the road from Kenora to the boundary is 34 miles. Of this distance, 12 miles were partly constructed last season by the Department of Public Works, and now requires to be graded. The 22 miles of proposed new road, besides opening up agricultural land, will pass through a section of country on which there are considerable quantities of tie and other timber, which at present cannot be reached.

I also found good agricultural land along the Canadian Pacific Railway, east of Dryden, which has been partly settled upon. The construction of a good trunk road along the right of way for 10 miles would greatly assist in promoting settlement in these sections, and enable the settlers to get their produce to a market.

\$75,000 would be required to cover the cost of these roads.

District of Thunder Bay.

In the District of Thunder Bay, in the sections tributary to Fort William and Port Arthur, roads have been constructed in different directions leading into the agricultural sections. After these roads reach a few miles beyond the limits of the cities it is difficult to travel over them during several months in the summer season. Many of them have never been graded or ditched, and settlers in the outlying districts find it difficult to get their produce to a market. There is a considerable area of good agricultural land in small sections between Fort William and Pigeon River, but as yet few settlers have located on the land, owing to the fact that it is difficult or almost impossible to reach this land for want of roads. A road has been partly constructed through the Slate River Valley and extending

southerly to the International boundary. It is impossible in the summer season however, to drive over a good portion of this road.

I beg to recommend the reconstruction of this road. I would also recommend that the road from Fort William into the Whitefish Valley be improved and graded. There is a large area of first class land in this valley and in the neighborhood thereof, which would be settled upon if there was one good road to a market. I would also recommend that two other trunk roads, tapping this main road, be constructed through the valley. Also that the old Dawson Road, which was constructed in the early seventies, be improved as far as the Kaministiquia River; also that a trunk road be constructed running north from the said Dawson Road through the township of Gorham; also that the extension of John Street through the township of Oliver and part of the township of McIntyre, be improved; and that the Oliver Road through the township of Oliver and part of the township of McIntyre be improved; that the main road west of Fort William into Slate River Valley be improved; and that a trunk road be constructed through the centre of the townships of Scoble, Gillies, and Lybster.

It will cost \$150,000 to carry out this work.

District of Sudbury.

I then proceeded to the Sudbury District and examined the different roads constructed tributary to the town of Sudbury and the mining sections. I found that while there is a good section of agricultural land to the west and north of Sudbury, through which roads have already been constructed, it is difficult, owing to the lack of good main roads, for the settlers to get their produce to the most important market in the district.

I beg to recommend that a main road leading West from Sudbury, passing the Murray Mine, and through the agricultural sections in the vicinity of Chelmsford and Larchwood, be improved; and a trunk road opened up north from Azilda, through the townships of Blezzard and Hanner; also that the Stobi Mine road be extended north; and that the main road from Sudbury north-easterly, known as the Wahnapitae Lake Road, passing the Garcon Mine, be properly graded. This road passes through a good mining section, as well as a section in which there is considerable land, suitable for agricultural purposes, not yet settled on. I also beg to recommend that the road between Sudbury and Connisan be extended from Connisan easterly along the line of the Canadian Pacific Railway, through Wahnapitae Station, and continuing easterly towards Markstay. The construction of this road would give to the settlers between Sturgeon Falls and Sudbury access to the town of Sudbury with their produce. Situated as they are at present, it is impossible for them to reach a market.

I would recommend that \$75,000 be expended on these roads.

Shining Tree Roads.

I also beg to recommend the construction of a wagon road from the Canadian Northern Ontario Railway, commencing about 80 miles north of Sudbury and running in a north-easterly direction to the West Shining Tree gold mining properties, now being developed in the vicinity of West Shining Tree Lake: and to further continue the said road in an easterly direction to the silver mining district on the East Shining Tree Lake, where considerable successful development work has been done. The length of this road would be approximately thirty miles,

through a country where no engineering difficulties will be met with in road construction.

This will not be an expensive road to construct, and I would recommend the expenditure thereon of \$25,000.

This road, besides opening up two very promising mining camps, would later on be of great service in connection with the development of the timber resources in that locality.

District of Algoma.

On the Sudbury and Sault Ste. Marie road, I would recommend the expenditure of \$50,000 on the Western section of this road.

District of Temiskaming.

I beg to recommend the construction of trunk and other roads along the main line of the Temiskaming and Northern Ontario Railway, and along the Earlton and Elk Lake and the Charlton branches thereof, extending west as far as the Montreal River, and east for a distance of about 20 miles, through the agricultural lands. Also short roads into the more important mining sections around Gowganda and Swastika.

I estimate that \$75,000 will be required to carry out this work.

I would also recommend the construction of new trunk and other roads along the Temiskaming and Northern Ontario Railway, and the Porcupine branch thereof, and in the townships east and west of the said railway between Matheson and Cochrane, including the cost of grading and improving roads cut out last season.

\$125,000 will be required for these roads.

Northern Part of the Districts of Temiskaming and Algoma.

From the information gained last season in constructing roads along the Transcontinental Railway, I am convinced that for the next few years, at all events, settlement along this line of railway and throughout the Clay Belt should, as far as possible, be permitted only in the best sections, where the land is most suitable for agricultural purposes; in localities well drained by the larger or main streams tributary to the Moose River; where the land is higher and less subject to summer frosts and requires less drainage; or in sections which have been burnt or partially burnt over, thus reducing the cost of clearing; and where the drainage has been improved by the burning off of the moss.

I, therefore, beg to recommend that first the roads which were cut out and not graded last year (owing to the inclemency of the season) should be graded this season and extended where settlement is most likely to take place. The work of last season in this locality extended east and west from Cochrane, and in a small section adjacent to the Quebec boundary.

In the vicinity of the Groundhog River, one of the eight largest tributaries of the Moose River, it is suggested that a new section be opened up for settlement. There is a very large area of fine agricultural land tributary to this stream, which is about 50 miles west of Cochrane. This area extends south of the Transcontinental Railway for nearly 50 miles, and for about 30 miles North. Twenty or more years ago, fire swept over a very large area along this river, and it is now grown up with a small second growth, and would be much more easily cleared and brought under

cultivation than the land covered with virgin forest. The soil is the usual clay or clay loam, with occasional sections of sandy loam. At the railway crossing there is a considerable clearing where vegetables and hav crops have been grown successfully since railway construction first began.

I beg to recommend the opening up of roads in two townships at this point, and the construction of a trunk road along the right of way for a distance of about 25 miles east and west from the river. The cost of this work, together with the work in the vicinity of Cochrane, and near the Quebec boundary, would amount to about \$150,000.

District of Nipissing.

At present there is a road between the towns of North Bay and Mattawa, which is passable for winter traffic and for light vehicles during the dry season. It follows in a general course the line of the Canadian Pacific Railway. The road is in bad condition in places, and in other sections the location of the road would require to be changed, in order to avoid bad hills. The distance between North Bay and Mattawa is 46 miles. This road will give to the settlers of the township of Chisholm access to a good market at North Bay or Callander for their farm produce.

I would recommend the expenditure of \$75,000 on this work.

District of Algoma.

I beg to recommend the expenditure of \$75,000 in the construction of a trunk road along the Transcontinental Railway east and west from the town of Hearst at the junction of the Algoma Central Ontario and the Transcontinental Railways, for a distance of about 25 miles; also the opening up of trunk roads in advance of settlement on the boundaries and centre lines of two townships at this point.

On completion of the Algoma Central Ontario Railway, within probably a year or 18 months, there should be no better point in the Clay Belt to commence a settlement than in the vicinity of this junction and divisional point of the railway. The land is well adapted for agricultural purposes, and owing to its splendid location and easy distance (160 miles) from navigation on Lake Superior, settlers should find an easy market for all the pulp timber on their land. A town of some importance will soon spring up at Hearst, and there seems no reason why the land should not be rapidly settled on if colonization roads are opened in advance of settlement.

Salaries.

A further sum of approximately \$25,000 will be required to pay the wages of inspectors, engineers, and office staff required to carry out the above works.

I have the honour to be, Sir,

Your obedient servant.

J. F. WHITSON, Road Commissioner. Memorandum giving the amount recommended to be expended in the construction of Main or Trunk Roads; and the improving by grading or otherwise, of main roads, or roads partially constructed; and also in the construction of a few short roads into sections sparsely settled, where few, if any, roads have as yet been constructed.

1. DISTRICT OF RAINY RIVER.		4.
Rainy River Valley, trunk and other roads	\$100,000	00,
Trunk roads	75,000	00
3. DISTRICT OF THUNDER BAY. Trunk roads through the agricultural sections tributary to Port Arthur		
and Fort William, extending northwest along the Grand Trunk		
Railway and Canadian Pacific Railway for a distance of 30 miles;		•
and west and southwest for about the same distance; and northeast of Port Arthur for a distance of 15 miles		00
4. District of Sudbury.	100,000	00
(a) Trunk roads to the agricultural and mining sections west and		
north of Sudbury for a distance of 25 miles; and northeast to Wahnapitae Lake through the mining and agricultural sections		
and east along the Canadian Pacific Railway, a distance of 25 miles		00
(b) A mining road from a point on the Canadian Northern Railway		
about 80 miles north of Sudbury, east to the mining districts around East and West Shining Tree Lakes		00
5. DISTRICT OF ALGOMA, AND SAULT STE. MARIE.		
Sections of the Sudbury and Sault Ste. Marie trunk road	50,000	00
(a) Trunk and other roads along the main line of the Temiskaming	•	
and Northern Ontario Railway, and along the Earlton and Eik Lake,		
and the Charlton branches thereof; extending west as far as the Montreal River, and east for a distance of about 20 miles, through		
the agricultural lands; also short roads into the more important		
mining sections around Gowganda and Swastika		00
(b) New trunk and other roads along the Temiskaming and Northern Ontario Railway, and the Porcupine branch thereof and in the		
townships east and west of the said railway between Matheson		
and Cochrane; including the cost of grading and improving roads cut out last season		ΔΔ
(c) New trunk roads along the Transcontinental Railway, and the		UU
grading of roads not completed last season, between the Quebec		
boundary and a point 60 miles west of Cochrane; in all, a distance of about 130 miles, along the line of the railway, and extending		
back from the railway from 6 to 12 miles		00
7. DISTRICT OF NIPISSING.		
Trunk road from North Bay to Mattawa, via Callander, and through the township of Chisholm	75,000	00
8. DISTRICT OF ALGOMA.	-	
New trunk roads along the Transcontinental Railway east and west of the town plot of Hearst, at the junction of the Transcontinental		
and Algoma Central Ontario Railways		00
9. Salaries.		00
For inspectors, engineers, and office staff	25,000 	00
	\$1,000,000	00

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Year Ending 31st October

1913

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

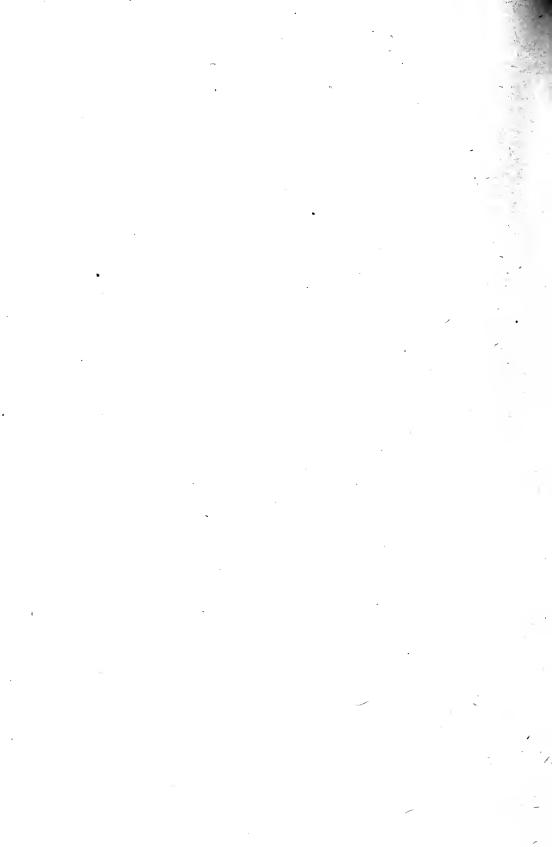


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Report of the Minister of Lands, Forests and Mines of the Province of Ontario

For the Year ending 31st October, 1913

To His Honour The Honourable Sir John Morison Gibson, K.C.M.G., Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit for the information of your Honour and the Legislative Assembly a report for the fiscal year ending 31st October, 1913, of the management of the Crown Lands of the Province.

CLERGY LANDS.

The area sold during the year was 181 acres, the value of which was \$424.57. The collection on account of Clergy Lands was \$1,284.38. (See Appendix No. 3, page 7.)

COMMON SCHOOL LANDS.

There were no sales. The collection on account of former sales was \$4,363.63. (See Appendix No. 3, page 7.)

GRAMMAR SCHOOL LANDS.

The area sold during the year was 121 acres, for \$542.25. The collection on account of these and former sales was \$729.90. (See Appendix No. 3, page 7.)

UNIVERSITY LANDS.

The area of these lands sold during the year was 10,484 acres for \$6,766.47. The collection on account of these and former sales was \$3,356.72. (See Appendix No. 3, page 7.)

Crown Lands.

There was sold during the year for agricultural and town site areas 202,088 acres for \$151,840.93. The collection on account of these and former sales was \$118,134.60. There was sold for mining purposes 34,375 acres for \$89,161.28. There was collected on account of these and former sales \$95,068.94.

There was leased for mining purposes 9.313 acres for \$9,313.21. There was collected on account of these leases and those of former years \$20,878.43. There was leased of Crown Lands an area of 4,309 acres for \$1,908.14. There was collected on account of these and the leases of former years \$18,348.05.

The total area of Crown Lands disposed of by sale and lease during the year was 260,873 acres for a value of \$259,956.88. The total collection on account of the sales, leases, etc., was \$262,164.65. (See Appendix No. 3, page 7.)

The Temiskaming region, covering by that expression the country lying between Haileybury and Cochrane, has had a considerable influx of settlers during the past year.

In the New Liskeard agency 239 settlers purchased 32,083 acres of land. In the Englehart Agency 112 settlers purchased 17,246 acres of land. In the Matheson Agency 385 settlers purchased 58,317 acres of land. In the Cochrane Agency 285 settlers purchased 42,683 acres of land, and in the Hearst Agency, recently opened, 63 settlers purchased 8,224 acres of land. Altogether in that region 1,084 settlers purchased 158,553 acres of land. In other parts of the Province 137 settlers purchased 18,130 acres of land.

When the Transcontinental Railway is in regular operation, a time table established and reliable freightage at reasonable rates secured, people will move into that country in large numbers. At present the country is handicapped by uncertain communication and heavy charges. The progress of that country, too, particularly in the Clay Belt, will measurably depend upon the developments that take place there. The land, of course, is intended for actual settlers. The class of people who will probably go in there will not be men of large capital and will have to depend in the future on local markets for what they have to sell, whether it be agricultural products or timber, and also for employment during the winter The Abitibi Pulp and Paper Company is rapidly completing a development which will give good markets and employment to a large number of people. This company will have a probable output of 250 tons of news print per day. They intend erecting this summer 75 houses for their workmen, which will give them altogether from 200 to 250 houses. They have laid out their town site and are putting in sewers and a water system. It is expected that their mill will be running some time in June and ready to turn out pulp commercially by the 1st of July. They have taken out about 40,000 cords of pulpwood this winter and when they are in full running order will require 90,000 cords for their paper mill. It will be seen from this what an important industry they are creating, and it is obvious how such a development will assist in opening up that region.

The New Ontario Colonization Company is pressing forward their development by the building of roads and the erection of houses, and are, in other ways,

making preparations to promote settlement on a considerable scale.

The Department has advertised for sale another pulp concession situated on the Metagami River on which development on a large scale is expected. Other developments of a similar character may be expected in the near future, and as soon as the Transcontinental is running and reasonable freights obtained, outside buyers of pulpwood will come in and widen out the market for settlers' timber.

The completion of the Algoma Central Railway to Hearst on the line of the Transcontinental will give a new outlet and inlet from Sault Ste. Marie and the large pulp mills at that place will be purchasers along the line of the Transcontin-

ental of supplies for their mills.

The Department is preparing the way for settlement by the construction of roads which will enable settlers to get to their lands without delay or hardship. There exists in the Clay Belt a vast region of enormous possibilities waiting for proper facilities for travel to become densely settled with prosperous people. It would be folly to attempt to bring large numbers into that region before it was properly opened up by railway and markets and employment available. It is better to make haste slowly than to have any setback later on.

FREE GRANTS.

Throughout the year practically 2,000 settlers located and purchased Free Grant lands to the extent of 240,000 acres, the greater areas having been taken up in the northern part of the Province. In the Districts of Thunder Bay and Rainy River along over 800 homesteaders were allotted lands; while in Dryden and Kenora Agencies nearly 200 took up Crown Lands subject to Free Grant regulations. In the older parts of the Province generally speaking there was a greater demand for Free Grant land, and the number of settlers exceeded the previous year by over 100. During the year 828 locatees completed their settlement duties and obtained their patents.

The only townships appropriated during the year ending 31st October, 1913, for Free Grant purposes were Henvey in the Parry Sound District and part of

McClintock in the Provisional County of Haliburton.

MILITARY GRANTS.

The total number of military certificates issued to date, under the Veterans Land Grant Act, 1 Edward VII., cap. 6, is 13998.

During the year there have been 146 certificates located, making in all a total

of 8,017 located.

There were 9 certificates surrendered to the Crown for the \$50.00 commutation, this makes a total of 3,226 certificates surrendered.

In 34 cases the certificates have been surrendered and applied in payment of lands purchased from the Crown making a total of 702 that have been applied in this manner.

During the year there have been 844 patents issued for lands located by veterans making a total of 6,405 thus disposed of.

The total number, therefore, of certificates that have now been redeemed is

11,945 leaving 1,953 still outstanding.

The locatees of all lands granted under this Act, must apply for their patents for such land before ten years have expired from date of location. If this application for patent is not made within the ten years, then the land comes under the settlement regulations, and unless the settlement duties are proceeded with, the locations are liable to cancellation.

THE MINERAL INDUSTRY.

The mineral production of Ontario in 1913 had a total value of \$53,207,311, the largest yet recorded in any year. Of this \$37,507,935 was of metallic, and \$15,699,376 of non-metallic substances. The increase over the output for 1912 was \$4,865,699, or more than 10 per cent.

METALS.

Gold.—There were 16 producing gold mines in 1913, 7 of which were in Porcupine, and 9 elsewhere. The Porcupine mines yielded 207,583 ounces of gold, or more than 94 per cent. of the whole production. Hollinger crushed 138,291 tons of ore for a yield of 118,558 ounces, the average contents recovered per ton for the year being .857 oz. At the Dome 131,149 tons were treated and 59,912 ounces of gold obtained, the average recovery per ton being .456 ounce.

The mill at the Dome mine is being enlarged and its capacity increased from 40 to 80 stamps. The completed mill is expected to be in operation during the spring of 1914. There were 5 other producers at Porcupine, the principal of which were Porcupine Crown and McIntyre-Porcupine. In their combined operations they treated 53,705 tons of ore, which turned out 29,093 ounces of gold, or an average yield per ton of .541 oz.

From the other gold districts, the production was as follows: Kirkland Lake and Swastika, 4,183 ounces, Long Lake, 5,879 ounces, Larder Lake, 700 ounces, Eastern Ontario, 1,065 ounces, and Northwestern Ontario, 1,262 ounces.

Much attention is being given to Kirkland Lake, where is situated the Tough-Oakes mine. From this property 101.049 tons of selected ore were shipped, which contained a gross value of \$46,685 or \$462 per ton. In addition 1,975 tons of lower grade material were put through a small stamp mill and \$26,232.31 in gold recovered, or \$13.28 per ton.

Silver.—The production at Cobalt was a little less than in 1912, being 29,681,975 fine ounces as against 30,243,859—a decrease of 561,884 ounces, or 1.85 per cent. High-water mark in this camp was apparently reached in 1911, when the yield was 31,507,791 ounces. The process of decline is proving more gradual than did that of increase, the falling-off in two years being only 5.7 per cent. The price of silver last year was lower than in 1912, the average in New York for the twelve months being 59.791 cents per fine ounce as compared with 60.835 cents. The result was to reduce the return to the mining companies by \$853,934, the value of the output being \$16,555,001.

To obtain the total yield of silver, there should be added to the Cobalt output 42,956 ounces recovered from the auriferous ores of Porcupine and the other gold camps.

It is now ten years since the silver deposits of Cobalt began to be worked, and up to the end of 1913, their total yield had a value of over 98 millions of dollars, the record in detail being as follows:—

Year	Ounces	Value
1904. 1905. 1906. 1907. 1908. 1909. 1910. 1911. 1912. 1913.	206,875 2,451,356 5,401,766 10,023,311 19,437,875 25,897,825 30,645,181 31,507,791 30,243,859 29,681,975	\$ 111,887 1,360,503 3,667,551 6,155,391 9,133,378 12,461,576 15,478,047 15,953,847 17,408,935 16,555,001

The life of the camp is being prolonged by the discovery of new veins, by the drainage of lakes so as to permit a more complete recovery of the deposits underlying them, and by an increasingly extensive concentration of low grade ore. Important veins were found last year when Kerr Lake was drained, and a promising find was made in February, 1914, on the old Kerry lease in the bed of Peterson Lake; the drainage of Cobalt Lake is about to be begun; and a new 80-stamp concentration plant has been built to take the place of the Northern

Custom plant sold to an English syndicate which has taken over the Cobalt Townsite and other mines.

Of the whole production of silver, 28,105,505 ounces came from the mines of Cobalt proper, the yield from the outlying camps being as follows:

Gowganda:— Miller-Lake O'Brien	oz. 469,923	OZ.
Mann		502,370
South Lorrain: Wettlaufer-Lorrain Casev:		248,992
Casey Cobalt	• • • • • • • • • • • • • • • • • • • •	825,108
Total		1,576,470

Nickel.—The quantity of ore smelted at the nickel-copper works in 1913, was 823,403 tons, which produced 47,150 tons of bessemerized matte. The nickel contents amounted to 24,838 tons, valued in the matte at \$5,237,477. In 1912, the production was 22,421 tons worth \$4,722,040, the increase being therefore a

little under 11 per cent.

The operating companies are the Canadian Copper Company, and the Mond Nickel Company. Of the ore treated by the former, 418,525 tons were taken from the Creighton mine, 54,646 from Crean Hill, 56,439 from No. 2, and 86,665 from No. 3. The last mentioned mine is also known as the Frood. The Mond Company's ore was derived as follows: from the Garson mine, 113,403 tons, from Victoria No. 1, 38,592 tens, from North Star, 11,294 tons, and from Worthington, 537 tons. This company also received and smelted 4,596 tons of ore from the Alexo mine in the township of Dundonald, on the line of the T. & N. O. railway, the product of which is similar in character to that of the Sudbury mines. The Mond company during the year removed their smelting plant from Victoria Mines to Coniston, some eight miles east of Sudbury, where they have erected a complete and well-equipped plant. The British America Nickel Corporation have acquired the holdings of the old Dominion Nickel-Copper Company, and are developing the Murray and Whistle mines. They raised no ore during the year.

The satisfactory results obtained by diamond drilling at the Murray, Frood, Garson, Levack and other properties, disclosing as they have, immense reserves

of ore, have established nickel mining in Ontario on an assured basis.

Copper.—The mattes produced at the Sudbury nickel-copper smelters furnished the only copper obtained in 1913, save for about 3 tons which accompanied some concentrates shipped from the Temiskaming silver mine, Cobalt. The quantity was 12,941 tons, valued in the matte at \$1,840,492. This compares with 11,126 tons in 1912, worth \$1,584,310, an increase of about 16 per cent. The percentage of the copper to the nickel in the Sudbury mattes last year was a little over 1 to 2.

Iron Ore and Pig Iron.—There were shipped from the iron mines of the Province last year 195,937 tons valued at \$424,072. Of this quantity 165,454 tons were of ore as taken from the mine, the remaining 30,483 tons were composed of 22,327 tons of roasted siderite from the Magpie mine, 4,841 tons of concentrates from the Trenton plant of the Canada Iron Mines, and 3,315 tons of briquettes from the Gröndal magnetic concentrating works at Moose Mountain. The latter mine, it is stated, will be in a position to ship 200,000 tons to the United States market in 1914. At the Magpie mine the Algoma Steel Corporation are enlarging

the capacity of the roasting plant which was erected to treat the siderite ore of which that deposit is composed.

The output of pig iron continues to grow, the product of the furnaces being 648,899 tons in 1913, worth \$8,719,892, as against 589.593 tons in 1912, valued at \$8,054,369—an increase of 10 per cent. in quantity and 8 per cent. in value. There are now eleven blast furnaces in the Province; of these only one, that of the Atikokan Iron Company at Port Arthur, was not in operation in 1913. During the year two new furnaces were blown in—one by the Canadian Furnace Company, Port Colborne, and the other by the Standard Iron Company at Parry Sound. The last named uses charcoal as fuel.

NON-METALS.

The output of non-metallic products showed a gain over 1912 of over 25 per cent.

The increase was general throughout the list. Out of 24 products, four showed a decrease aggregating \$162,163, while the remaining 20 increased by \$2,319,679.

The largest falling off was in corundum, \$96,176; quartz receded by \$48,716,

arsenic by \$15,151, and mica by \$2,120.

On the other hand, Portland cement advanced by \$739,805, pressed brick by \$237,122, stone by \$183,314, natural gas by \$68,999, sewer pipe by \$135,670, common brick by \$274,102, iron pyrites by \$100,644, etc. Three of the Canada Cement Company's plants were shut down about the beginning of 1914, and will not likely be opened again this year.

Sand and gravel, of which statistics were collected for the first time, show a

production valued at \$233,567.

It is noteworthy that although the output of petroleum continues to decline—the reduction in 1913 as compared with 1912 being 516,969 gallons—the value was greater by \$53,514.

Construction materials, as a whole, including brick of all kinds, lime, stone and cement, had an increased production of \$1,512,845, or 7.3 per cent., as follows:

Product	1912	1913
BricksLimeStoneCement	\$ 4,034,405 381,672 953,839 3,365,659	\$ 4,615,212 . 390,600 1,137,153 4,105,455
Total	8,735,575	10,248,420

Notes.

Water Power.—The mines and metallurgical plants of northern Ontario are now for the most part operated by electricity generated by water powers. This is true of Cobalt, where falls and rapids on the Montreal and Matabitchewan rivers are utilized; of Sudbury, where the mines and smelters are supplied with power by the Spanish, Wahnapitae and Vermilion rivers; of Porcupine, to which power is conducted from the Mattagami; of Michipicoten, where the Michipicoten and Mag-

pie hoist the ore and operate the machinery at the Helen and Magpie mines; of the Canadian Exploration Company's gold mine at Long Lake, and of others. A new water power installation is being put in at Gowganda Lake to operate the Miller-Lake O'Brien silver mine, and a transmission line is under construction from the Blanche river at Charlton to work the gold properties in the new field at Kirkland lake. Water powers are numerous in northern Ontario, and, as at Iroquois Falls on the Abitibi river, are employed also to operate pulp and paper mills. They have been of great service to the mining industry in providing cheap power.

Collections.

The total revenue of the Department from all sources was \$2,793,809.87. Of this \$118,134.60 came from agricultural and town sites; mining lands \$95,068.94; mining and crown leases \$39,226.48; miners' licenses, permits and recording fees \$93,256.10; royalties \$200,333.01; supplementary revenue tax \$211,063.84. From woods and forests the revenue was \$1,979,125.81, made up of the following items, bonus \$591,675.29; timber dues \$1,277,490.08; ground rent \$99,460.19; transfer fees \$10,500.25. (See Appendix No. 4, page 8.)

DISBURSEMENTS.

The total expenditure of the Department for ordinary services was \$696,051.63. Some of the principal items were: Agents' salaries and disbursements \$15,812.69; homestead inspectors \$11,127.96; Crown timber agents \$30,537.69; wood ranging and estimation of timber \$94,697.40; fire ranging \$145,500.81; forest reserves, fire ranging, etc., Temagami reserve \$46,326.93, Metagami reserve \$8,882.88, Mississaga reserve \$12,680.63, Nipigon reserve \$12,264.73, Eastern reserve \$2,941.56, Quetico reserve \$4,077.00; mines and mining \$37,553.94; mining recorders \$26,304.75; surveys \$89,123.51; refunds \$13,986.24; contingencies, lands and forests \$20,375.89, bureau of mines \$12,258.13.

There was expended under the direction of the Department the sum of \$1,120,471.60. Of this amount, \$1,081,172.28 was in connection with the northern development, under 2 Geo. V, while the other principal items were, Algonquin Park \$21,554.09, exploration party in new territory, \$2,932.64, and expenditure under Bounty Act 7 Edward VII., cap. 14, \$14,362.59. (See Appendix Nos. 6 and 7, pages 10 to 33.)

WOODS AND FORESTS.

The total revenue accrued for the year ending the 31st of October, 1913, from woods and forests was \$2,127,222.56—an increase of \$59.162 over last year. The revenue collected during the year from the same source amounted to \$1,979,125.81, which is only about \$6,000 less than the collection of last year; and last year was somewhat of a record year, as the revenue collected exceeded that of the previous year by \$274,000. The revenue derived from timber dues was \$1,277,490.08 as against the collection of \$1,339,957.12 for last year. The collection on account of bonus was \$591,676,29 as against the collection of \$540.702.85 for last year. The collection on account of ground rent was \$99,460.19 as against \$96,262 for last year. The collection on account to transfer bonus was \$10,500 as against \$8,740 for last year.

The area under timber license for the season of 1913 was 17,519½ miles as against 18,410 miles for last year. The area under license fluctuates from year to

year for the following reasons: Areas are cut out and surrendered by the licensees and there are other areas on which the ground rent is not paid and the license does not issue. There was surrendered this year 257 miles and new licenses were issued for areas sold during the year amounting to about 100 miles. The output of pine sawlogs, booms and square timber in feet board measure was 360,377,168 feet board measure, which is 127,661,498 feet board measure below the output of last The output of timber other than pine was 64,497,036 feet board measure as against 69,373,572 feet board measure for last year. The quantity of pulpwood taken out from Crown Lands was 131,434 cords as against 140,338 cords for last year. There were 6,355,828 pieces of railway ties taken out this year as against 5,704,559 for last year, or an increase of 651,269 ties over the output for last year. It will be seen that, as was expected, the output of all kinds of timber was considerably below the output of last year, except railway ties. The great scarcity of money compelled a number of lumbermen to shorten up their operations, while others did not operate at all. It is not expected that there will be much increase in the cutting of the present winter as the financial stringency has not entirely ceased.

During the year the pine timber in the Townships of Thistle and McWilliams tributary to Lake Nipissing was offered for sale by public tender. The Department had careful examinations made of the Townships which showed that a large percentage of the timber in them was mature and that the large timber was very faulty. There was a request from the Ontario Pulp Company to be allowed to get a part of its supply in these townships, and there was the danger of fire owing to the construction of the Canadian Northern Railway in the neighborhood. Under these circumstances it was considered advisable to offer the timber for sale, and it was accordingly sold, subject to an increase in ground rent from \$5 to \$10 per mile, and an increase in the timber dues from \$2 per thousand to \$5 per thousand, and the important condition was put in that no trees of a less diameter than 12 inches on the stump 2 feet from the ground should be cut. The increase of the ground rent and timber dues was a substantial one and the conditions prohibiting the cutting of small trees were new. The amount realized from the sale was \$147,500 or an average per acre of about \$3 with \$5 per thousand to be paid when the timber is cut.

FIRERANGING.

The fireranging service during the summer was composed of 217 rangers in forest reserves, 208 on railways, and 114 on lands of the Crown. There were 34 chief rangers including the services of the Crown Timber Agents; 4 assistant chief rangers, and 8 supervising rangers on licensed lands, making a total of 585 men. The timber licensees had on their various limits 350 rangers, so that the total staff of firerangers on duty last year was 935 men. There were no serious fires during the past season on lands of the Crown except in the Township of Dana, and there the timber damaged was disposed of and will be cut this winter. On licensed territory the Georgian Bay Lumber Company had some timber burnt by locomotives of the Canadian Pacific Railway, and on the Booth limits tributary to the Mattawa River some timber was damaged in the course of railway construction. These are the only fires of any consequence which occurred on lands of the Crown or licensed territory during the present year.

Forest Reserves.

The Temagami Forest Reserve had a staff of 137 firerangers under 4 chiefs. The area of this reserve is about 6,000 miles. There being a large quantity of timber in the reserve it is necessary that it should be very closely guarded. There have been no fires in the reserve during the past year.

The Mississaga Reserve contains an area of about 3,000 miles. There is a large quantity of first-class pine in this Reserve. There has been a staff of 32 rangers in this Reserve during the past summer under a chief ranger.

territory has been efficiently patrolled and no fires have occurred.

The Nepigon Reserve is the largest Reserve in the Province, having an area of 7,300 miles. It is not a pine country but there are large quantities of pulpwood in it. Two railways are being built through it and it is a popular fishing resort. It therefore requires to be closely ranged. We had 20 rangers on duty in this Reserve in addition to those on railway construction where railways are being built through it.

The Quetico Reserve is situated in the Rainy River District lying along the boundary line between Canada and the United States. It contains an area of 1,500 miles and there is a large quantity of pine in it. It is away from settlement and is therefore not in so much danger from fire. There were 14 firerangers in this Reserve last year in charge of Mr. Crown Timber Agent Watts. No fires occurred. The changing of this Reserve into a park so as to give better protection to the game is under consideration.

The Eastern Reserve is situated in the County of Addington and has an area of 100 square miles. The timber in this Reserve is stated to be growing up very rapidly. There were no fires in it during the past year and it was protected by a chief ranger with 6 rangers under him.

What is called the Sibley Reserve contains an area of 70 miles and it covers the promontory called Thunder Cape at the entrance of Thunder Bay. No fires

have occurred in this Reserve.

The Algonquin National Park has an area of 2,741 miles. Ten firerangers in addition to the ordinary park rangers were on duty there during last summer. Owing to the construction of the Canadian Northern Railway through the Park it became necessary to give it better protection.

Rondeau Park. This Park was formerly administered by this Department, but by Order in Council of May, 1913, it was transferred to the Public Works

Department, and it is now controlled by that Department.

RAILWAYS.

Full staffs of rangers have been on duty on the different railways. On the Temiskaming and Northern Ontario Railway there have been 58 rangers on duty under 3 superintendents: on the Transcontinental Railway 64 rangers under 3 chiefs; on the Canadian Northern 86 rangers under 5 chiefs, and on the Algoma Central Railway 26 rangers under 2 chiefs.

No serious fires occurred along any of the railways except as before stated in the Township of Wood on the Canadian Pacific Railway and along the construction of the Canadian Northern in the Township of Dana and on the Booth limits

tributary to the Mattawa River.

The expenditure on fireranging for the past year has been as follows:

On Crown Lands	\$65,000.00
On Railways	80,000.00
On Forest Reserves	

CULLERS' EXAMINATIONS.

Cullers' examinations were held at North Bay and Kenora. Fifteen candidates were successful at these examinations and were granted certificates authorizing them to act as cullers.

(For list of cullers who passed at the above examinations see Appendix 39

page (102.)

(For complete list of licensed cullers see Minister's reports for 1911 and 1912.)

CROWN SURVEYS.

The following Crown Surveys have been undertaken this year:

Instructions were given for the subdivision of the following townships:

Township of Lowther, in the District of Algoma.

Township of Scholfield, in the District of Algoma.

Township of Caithness, in the District of Algoma.

Township of Talbott, in the District of Algoma.

Township of Orkney, in the District of Algoma.

Township of Shetland, in the District of Algoma.

Township of Ebbs, in the District of Algoma.

Township of Sterling, in the District of Thunder Bay.

Township of O'Brien, in the District of Timiskaming.

Township of Malachi, in the District of Kenora.

Also outlines of townships in the District of Sudbury.

Outlines of townships in the District of Kenora.

Outlines of townships in the District of Kenora.

Timber Berths in the District of Kenora.

Timber Berths in the District of Kenora.

Certain lands adjoining the townships of MacGregor, Gorham and Ware, District of Thunder Bay.

Survey of Cache Lake, township of Canisbay, in the Algonquin National Park.

Inspection of surveys.

The report of the surveyors, so far as received and examined, will be found in appendices 18 to 36 inclusive, pages 50 to 91 inclusive.

MUNICIPAL SURVEYS.

On the petition of the Municipal Council of the township of Hinchinbrooke, instructions were issued to survey the line between concessions 7 and 8 from lots 9 to 13, in the township of Hinchinbrooke, or as much farther on each side as an original post can be found.

Also on a petition of the Municipal Council of the township of Toronto, instructions were issued to survey the allowance for road between the 1st and 2nd ranges, Credit Indian Reserve, south of Dundas Street, township of Toronto, from the north-west angle of lot No. 8, 1st range, across lots Nos. 9, 10, 11, 12, 13 and 14 in the 1st range, and lots Nos. 6, 9 and 10 in the 2nd range, Credit Indian

Reserve, and thence along the road allowance between the 2nd range, Credit Indian Reserve, and the 2nd Concession of Toronto Township south of Dundas Street, being across part of lot 22, lot 23, lot 24 and lot 25 in the 2nd concession south of Dundas Street, to the westerly limit of said lot 25, being the easterly limit of the allowance for road between lots Nos. 25 and 26, known as the "Lorne Park Road" and as regards the 2nd range on the northerly side of said road allowance being across parts of lots numbers 10, 11 and 12 and part of lot 13 in the 2nd range, Credit Indian Reserve, and to define said allowance for road by permanent stone or iron monuments planted on each side thereof.

The following municipal surveys have been confirmed under the provisions of the revised Statutes of Ontario, 1897, Chapter 181, Sections 14 and 15, such

surveys being final and conclusive.

To survey certain concessions, road allowances, etc., formerly in the township of Barton, now in the city of Hamilton as follows: Barton Street from Sherman Ave. to the allowance for road between lots Nos. 2 and 3 of the township of Barton now in the City of Hamilton. Main Street from Sherman Ave. to Ottawa Street. The allowance for road between the 3rd and 4th concessions of Barton now in the city of Hamilton from Ottawa Street westerly to the city limits. Sherman Ave. from the brow of the mountain northerly to the base line. Trolley Street from the brow of the mountain northerly to Burlington Bay. Ottawa Street from the brow of the mountain northerly to Burlington Bay. Allowance for road between lots 2 and 3 from the City of Hamilton water works pipe line to Barton St. and to plant durable monuments at the front and rear of the said portions of the concessions and allowances for road between lots in the city of Hamilton, and at the front and rear angles of the lots therein, also to plant durable monuments at the front and rear of the following portions of concessions and allowances for road between lots in the city of Hamilton, and at the front and rear angles of the lots therein-from the eastern limit of Lakeview Ave. to the head of the Strongman Mountain Road. From Bay Street to allowance for road between lots 20 and 21 known as Paradise Road. Paradise Road from Aberdeen Ave. to Marsh known as Coots Paradise.

Also to survey the line between concessions 7 and 8 from lots 9 to 13, in the township of Hinchinbrooke, or as much farther on each side as an original post can be found.

Also to survey the boundary line between the townships of Montague and Beckwith, in the County of Lanark, and to plant stone and other durable monuments on each side of the road allowance in such positions as shall define the true boundary between the said townships.

Particulars relating to these surveys will be found in Appendices 14 and

15, pages 44 and 45.

W. H. HEARST,

Minister.

Department of Lands, Forests and Mines. Toronto, October 31st, 1913.



APPENDICES

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1913.

Remarks.	•			,	
Salary per annum.	6,00 4,200 00 2,800 00 1,700 00 1,900 00 700 00	2,250 00 1,650 00 1,350 00 1,300 00 1,050 00 1,050 00 876 00 725 00 700 00	1,500 00	2,700 00 2,500 00 2,100 00 1,350 00 1,550 00 1,300 00	1,200 00 1,150 00 1,050 00 1,050 00
When appointed.	1, Oct. 12 2, Jan. 1 2, Feb. 1 39, May 1 5, Jan. 1 6, Jan. 1	2, May 1 14, Feb. 5 18, Jan. 1 17, March 13 18, March 13 19, March 24 19, March 24 19, Cot. 5 15, Oct. 23 16, Oct. 23 16, March 24 16 17, Jan. 16 19, March 24	1907, March 13		1904, Jan. 13 1911, March 3 1907, March 13 1909, March 24 1912, Oct. 6
Designation.	Minister 1911, Deputy Minister 1882, Law Clerk 1872, Minister's Secretary 1912, Secretary to Department 1889, Clerk 1905, Stenographer 1910,	Chief Clerk 1903, Glerk 1903, do 1908, do 1907, do 1909, do 1909, do 1909, do 1909, do 1909, do do 1909,	Chief Clerk	Director of Surveys 1866,	Draughtsman
Name.	Hon. W. H. Hearst Aubrey White Geo. Kennedy C. C. Hele E. S. Williamson Janet Garvie James Farrington	J. J. Murphy Walter C. Cain W. R. Ledger Selby Draper S. A. Platt F. Lucas F. Samuels W. B. Baines May Bengough Jean C. Oram Nan McQueen	H. E. Johnston		H. Treeby John Work F. E. Blanchet A. Leaman B. Rushford
Branch.		Sales and Free Grants	Military Grants. $\left\{ ight.$		Surveys

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88888	888888	000000000000000000000000000000000000000	0000000	00	000
700 700 600 600 600	2,000 1,400 1,300 1,200 1,000	2,250 1,650 1,450 1,450 1,250 1,250 1,250 1,250 950 950 850 850 650	2,450 1,500 1,100 800 675 1,550 1,150	2,500 1,600	3,800 1,250 1,100
Nov. 23 March 24 March 3 March 3 March 3	May 22 April 9 Jan. 13 Jan. 15 May 8 March 24	Dec. 1 Aug. 1 April 9 March 6 Jan. 13 Nov. 23 March 13 March 24 Nov. 1 June 1 April 30 April 30 March 24 Sept. 1	April 15 Jan. 13 March 13 April 30 March 3 March 1	Nov. 7 Sept. 22	June 19 March 13 Jan. 1
1904, 1909, 1911, 1911, 1911,	1890, 1900, 1902, 1904, 1894, 1909,	1867, 1898, 1900, 1900, 1904, 1907, 1909, 1911, 1911, 1910, 1909,	1861, 1904, 1907, 1913, 1911, 1880, 1907,	1912, 1913,	1891, 1907, 1906,
Stenographerdo do do do do do do	Chief Clerk Clerk do do do do	Chief Clerk do do do do do do do do do do do do do	Accountant Clerk do do Clerk and Stenographer Registrar Clerk	Director	Deputy Minister Secretary Clerk
M. H. Kirkland E. G. Halliday E. C. Armer, B. Benson C. O'Connor	C. S. Jones C. E. Burns W. S. Sutherland W. Carrell A. E. Robillard A. E. Roe	J. A. G. Crozier J. B. Cook H. Gillard F. J. Niven W. F. Trivett R. H. Hodgson J. Houser A. H. O'Neil A. H. O'Neil A. H. O'Neil S. D. Meeking A. P. Saunders Amy Thompson M. E. Bliss	D. G. Ross H. M. Lount C. J. Clarke R. Gordon C. Bowland Frank Yeigh Chester Dies	E. J. ZavitzF. S. Newman	Thos. W. Gibson R. D. Fisher W. H. Morris
	Patents	Woods and Forests	Accounts	Forestry	Bureau of Mines

Appendix No. 1.—Concluded.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st. 1913.

	RELI OI
Remarks.	
Salary per annum.	\$ c. 1,100 00 1,100 00 1,100 00 1,000 00 950 00 775 00 725 00 600 00 875 00
When appointed.	1908, April 8 1908, April 8 1907, March 13 1901, March 24 1910, April 14 1906, May 16 1907, March 13 1909, March 24 1911, Dec. 19
Designation.	do do do do do Clerk and Stenographer do Stenographer do Messenger
Name.	Bureau of Mines A. G. Scovell D. W. St. Dohn S. W. St. John Ethel Craig J. L. McNaughton H. W. Batchelor H. W. Batchelor
Branch.	Bureau of Mines

D GEO, ROSS,
Accountant.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 2

List of Land Agents and Homestead Inspectors for the year ending October 31st, 1913.

Remarks.	c. 000 000 000 000 000 000 000 000 000 0
i.	
Salary per annum.	\$500 1,200 600 1,200 1,200 1,200 1,200 600 600 600 600 600 600 600 600 600
nt.	117
Date of pointme	May 9
Date of appointment.	1913, May 9 1907, Oct. 1 1906, Nov. 23 1913, May 2 1913, July 17 1905, Oct. 20 1905, July 3 1901, Nov 30 1905, July 3 1901, Nov. 15 1911, April 27 1906, June 8 1913, March 21 1911, June 1 1911, March 20 1912, June 1 1911, July 17 1906, July 3 1906, July 3 1908, July 29 1908, July 3 1908, July 17 1911, July 17 1911, July 17 1911, July 17 1906, July 3 1908, July 29 1908, July 29 1908, July 29 1908, July 29 1908, July 29 1908, July 29 1908, July 29 1908, July 3
District or county.	Part of District of Algoma Part of Victoria Homestead Inspector do Lake Temiskaming, District of Nipissing Part of Frontenac and Addington Homestead Inspector and Crown Land Agent Part District of Sudbury do Algoma Homestead Inspector Ao Ao Bart of District of Rainy River Homestead Inspector do District of Parry Sound do District of Parry Sound do do do do do do do do do
Post office address.	Hearst Minden Minden Fort Frances Chelmsford New Liskeard Denbigh Bracebridge Massey Thessalon Port Arthur Sundridge Stratton Sta. New Liskeard Sault Ste. Marie. Cochrane Cochrane Magnetawan Magnetawan Magnetawan Matheson New Liskeard Chelmsford Chelmsford Matheson New Liskeard Greenview Powassan Magnetawan Matheson New Liskeard Chelmsford Apsley Fort Frances Murillo Emsdale Warren Blezard Valley Sudbury Emo
Name.	Anderson, T. V. Baker, R. H. Barr, Jas. Bastien, J. A. Bolger, J. W. Both, Chas. Brown, J. B. Byers, R. J. Buchanan, T. Buchanan, T. Cragg, W. V. Cameron, Wm. Chester, T. Cragg, W. V. Dean, Thos. Dempsay, S. J. Douglas, W. J. Freborn, Dr. J. S. Grills, H. J. Freborn, Dr. J. S. Grills, H. J. Hughes, Thos. Hughes, Thos. Jenkin, Wm. Langlois, E. Lemieux, J. A. MacLennan, J. K. MacLennan, J. K.

Appendix No. 2.—Concluded.

List of Land Agents and Homestead Inspectors for the year ending October 31st, 1913.—Continued.

Remarks.	\$ c. \$ c. 100 00 300 00 500 00	WHITE, Deputy Minister of Lands and Forests.
Salary per annum.	\$ c. 100 00 00 00 00 00 00 00 00 00 00 00 00	AUBREY WHITE, Deputy Mini
Date of appointment.	1912, June 1. 1912, June 6. 1998, April 8. 1907, Sept. 13. 1906, May 31. 1906, May 7 1906, May 7 1909, March 1. 1912, April 16. 1909, Sept. 21. 1909, May 28. 1905, May 31. 1909, May 10. 1913, May 28. 1905, May 10.	AUBRE
District or county.	Espanola Sta. Sault Ste. Marie. Sault Ste. Marie. Soluth Bay. Sturgeon Falls Parry Sound Wilno Dryden Sturgeon Falls Sturgeon Falls Sturgeon Falls Sturgeon Falls Sturgeon Falls Sturgeon Falls Sturgeon Falls Sturgeon Falls Mattawa Cochrane Renora Pembroke No Renfrew Nembroke No Renfrew Nembroke No Renfrew No Renfrew No Renfrew No Renfrew No Renfrew No Renfrew No Renfrew No Renfrew Homestead Inspector Part of Renfrew Marksville Sturgeon Falls Homestead Inspector Homestead Inspector Sturgeon Falls Homestead Inspector Bent Of Renfrew O Peterboro Go Peterboro Go Peterboro A District of Nipissing	
Post office address.	Espanola (Sault Ste.) North Bay Sturgeon J. Parry Sou Wilno Dryden Sturgeon J. Sault Ste. Mattawa Cochrane Kenora Ke	ntant.
Name.	Mulvaney, N. Sault Ste. Noble, E. North Bay Philion, J. A. Sturgeon Prince, A. Parry Sou Pronger, R. H. Wilno Pronger, R. H. Dryden Quenneville, I. Sturgeon Rothwell, B. J. Sault Ste. Small, Robt. Cochrane Spry, W. L. Kenora Kenora Warren, D. B. Fembroke Watson, T. P. New Liske Watson, T. P. Pembroke Watson, T. P. Pembroke Watson, James Whybourne, W. E. Righehart Whybourne, W. E. Englehart	D. GEO. ROSS Accountant.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections for the year ending October 31st, 1913.

Service.	Acres sold and leased.	Amount of sales and leases.	Collection on sales and leases.	
Lands Sold:		\$ c.	\$ c.	
Agricultural and Townsites	202,088.03	151,840 93		
Mining	34,375	89,161 28	95,068 94	
Clergy	181.81	424 57	1,284 38	
Common School			4,363 63	
Grammar School	121	542 25	729 90	
University	10,484.86	6,766 47	3,356 72	
Lands Leased:				
Mining	9,313.24	9,313 24	20,878 43	
Crown	4,309.86	1,908 14	18,348 05	
•	260,873.80	\$259,956 88	\$262,164 65	

D. GEO ROSS. Accountant. AUBREY WHITE. Deputy Minister Lands and Forests.

Appendix No. 4.

Statement of Revenue of the Department of Lands, Forests and Mines for the year ending October 31st, 1913.

Service.	\$ c.	\$ c.	\$ c.
LAND COLLECTIONS. Crown Lands: Agricultural Townsites Mining	111,731 24 6,403 36	118,134 60 95,068 94	
Clergy Lands	1,284,38 4,363 63 729 90 3,356 72	213,203 54 9,734 63	
Rent: Mining Leases Crown Leases	20,878 43 18,348 05	39,226 48	
Miners' Licenses Permits Recording Fees Royalties	44,065 80 995 00 48,195 30	93,256 10 200,333 01	
Supplementary Revenue: Acreage Tax Profit Tax Gas Tax Woods And Forests.	13,915 70 173,532 65 23,615 49	211,063 84	766,817 6
Bonus Timber Dues Ground Rent Transfer Fees		591,675 29 1,277,490 08 99,460 19 10,500 25	1,979,125 8
Provincial Assay Fees Casual Fees Cullers' Fees			
Algonquin Park Rondeau Park Forest Reserves REFUNDS,	8,270 45 1,196 83 1,070 70		11,866 6
Fire Ranging Wood Ranging Surveys Contingencies Agents' Salaries Mining Recorders		22 41 26 05	
Mines and Mining			35,999 8

D. GEO. ROSS, Accountant. AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year ending October 31st, 1913, which are considered as Special Funds.

Service.	\$	с.	\$ c.
Clergy Lands. Principal.		3 19 3 19	1,284 38
Common School Lands. Principal Interest	1,308	3 50 0 13	4,363 63
Grammar School Lands. Principal Interest) 45) 45	729 90
University Lands. Principal. Interest	3,040 316	58 14	3,356 72

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines for the year ending October 31st, 1913.

Service.	\$ c.	\$ c	\$ c.
Agents' Salaries and Disbursements.			*
Land, \$15,812.69.	200 22		
Anderson, T. V. Disbursements	208 33 46 17	254 50	
Baker, R. H	350 00 1 58	. 051 50	
Both; C		351 58 100 00	-
Bolger, J. W	125 00 24 00	140.00	
Brown, J. B	900 00 118 60 50 00	149 00	
Buchanan, Thos.		1,068 60 300 00	
Burrows, W. A. Disbursements	550 00 89 50	300 00	
Byers, R. J		639 50 500 0 0	
Cameron, W	500 00 35 50		,
Dempsay, S. J	550 00 42 95	535 50	
Douglas, W. J	500 00 11 82	592 95	
Ellis, H. J.		511 82 500 00	
Freeborn, Dr. J. S	500 00 10 75	F10 8F	
Ginn, F. E	550 00 79 23	510 75	
Grills, J. J. Disbursements	375 00 56 60	629 23	•
Hales, W		431 60 250 00	•
Hollands, C. J		300 00	•
Jenkin, Wm	500 00 7 38	707 00	
Langlois, E	•••••	507 38 500 00	
Lemieux, J. A.		400 00	
Mulvaney, N	100 00 4 61	104 61	
		$\frac{104 \ 61}{9.137 \ 02}$	

Service.	\$ c.	\$ c.	\$ c.
Brought forwardd		9,137 02	
AGENTS' SALABIES AND DISBURSEMENTS Continued.			
Land.—Concluded.			
McFayden, A. Disbursements	500 00 57 32	557.00	
MacLennan, J. K. Disbursements	500 00 30 00	557 32	
Noble, E		530 00 225 00	
Parsons, W. J. Disbursements	500 00 8 50		
Philion, J. A	500 00 13 97	508 50	
Powell, F. R. Disbursements	500 00 17 00	513 97	
Prince, Adam	500 00 15 50	517 00	
Pronger, R. H. Disbursements	500 00 18 10	515 50	
Rothwell, B. J.		518 10 75 00	
Small, R. Disbursements	$\begin{array}{ccc} 500 & 00 \\ 6 & 24 \end{array}$	T 00 04	
Spry, W. L Disbursements	400 00 482 90	506 24	
Warren, D. B		882 90 150 00	
Watt, F		118 90	
Whybourne, W. E. Disbursements	250 00 18 14	000.11	
Wilson, J Disbursements	162 50 12 60	268 14	
Woollings, Jos. Disbursements	550 00 64 00	175 10	
Homestead Inspectors, \$11,127.96.		614 00	
Barr, J. Disbursements	1,200 00 725 20	1 007 00	
Bastien, J. A. Disbursements	282 25 113 45	1,925 20	
Burnes, C. W	900 00 427 65	395 70	
Chester, T	500 00 133 81	1,327 65	
-		633 81	
Carried forward		20,095 05	

Service.	\$	c.	\$	c.	\$ c.
Brought forward			20,095	05	
Agents' Salaries and Disbursements.—Continued.					,
Homestead Inspectors.—Concluded.				1	1.0
Cragg, W. V. Disbursements	700 307		1,007	00	
Dean, T	600 34	00 20		20	
Groulx, R. J		75 45			
Hughes, T		000		20	,
Quenneville, I		0 00	1,191		. (*
Smith, D) 00) 55) 15	
Watson, T. P		6 66 3 05	1,310		
Timber, \$30,537.69.			1,499	9 71	
Bremner, Geo		0 00 5 45	20.		
Christie, W. P	1,600	0 00		5 45	-
Hawkins, S. J		0 00 9 36	2,05		
Henderson, C. Webster, W. A., Assistant Disbursements	1,60		1,94		
Johnson, S. M		0 00 2 18	3,88		***
McDonald, H Disbursements		0 00 9 07	1,77		
McDougall, J. T		0 00 3 86	1,87		
MacDonald, S. C		0 00 3 92	1,92	3 86	
Margach, Wm. Legris, J., Assistant Disbursements	. 1,30	0 00 0 00 2 42		3 92	
Maughan, Jos	1,00	0 00 7 46	5,54	2 42	
			1,98		

Service.	\$ c.	\$ ° c.	\$ c.
Brought forward		50,375 15	
AGENTS' SALARIES AND DISBURSEMENTS.—Concluded			
Timber.—Concluded.			
Oliver, J. A Penfold, G. S., Clerk Disbursements	1,500 00 799 97 803 73	2 102 70	
Stevenson, A. Disbursements	1,500 00 389 74	3,103 70	
Watts, Geo	1,500 00 609 75	1,889 74	
Miscellaneous, \$1,594.22.		2,109 75	
Ames, D. H., Caretaker, Islands in Dog and Laboria Lakes		20 00	
South Crosby		25 00 8 20	
Danis, S., Caretaker, Leonard Islands Evans, F., Inspecting Townships of Britton and		20 00	
Rowell		75 00 25 00	
lots	600 00	15 00 5 00	
Margach, J. A., Inspecting Townships of Britton		1,083 60	
and Rowell Moran, A., Inspecting Township of Burns		17 42 300 00	59,072 56
OTTAWA AGENCY.			35,012 30
Darby, E. J., Agent Larose, S. C., Clerk Rent Disbursements		1,500 00 1,000 00	
Wood Ranging.	03 31	583 51	3,083 51
Allen, R. A. Ansley, W. E. Arnill, William Atcheson, Ira M. Appleton, E. Bailey, S. I. Barrett, Thomas Bates, R. Baulk, G. R. Bliss, L. E. Disbursements	775 00	1,150 00 700 00 705 00 740 00 348 00 940 00 1,030 00 620 00 260 00	
Bremner, George			
Carried forward	.	9,113 88	62,156 07

	<u> </u>		
Service.	\$ c.	\$ c.	\$ c.
Brought forward		9,113 88	62,156 07
Wood Ranging.—Continued.			
Brown, J. F.			
Buchan, T. Buchan, S.		580 00 810 00	
Buie, D		670 19	
Buisson, William	•••••	665 00 542 50	•
Callaghan, T		600 00	
Castonguay, A. C		85 00 945 00	
Clark, W. R.		316 00	
Comer, B. F		280 00	
Coomes, Roy		20 00 950 00	
Coyne, Phin		865 00	
Cross, J. G	• • • • • • • • • • • • • • • • • • • •	212 00 284 00	
Didier, H		1,285 00	
Dougherty, J. M	• • • • • • • • • • • • • • • • • • • •	160 00 1,365 00	
Duval, C. A.	775 00	1,505 00	
Disbursements	2 20	777 20	
Evans, Fred.		777 20 17 50	
Faulkner, W		364 00	
Ferguson, E. A. Fisher, George		$\begin{array}{c} 890 \ 00 \\ 1,050 \ 00 \end{array}$	
Frankar, A		20 00	
Fraser, D. Fraser, T.		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Gamey, W. H.		720 00	
Gill, C. Gilligan, E.		160 00	
Disbursements	$egin{array}{cccccccccccccccccccccccccccccccccccc$		
Gorman, J. P.		846 50	
Hagan, E. G.		591 73 685 00	
Harkins, J. J.		296 00	ŧ
Hartley, C Disbursements		1,280 00 29 50	•
Hey, Ben		360 00	
Huckson, A. H. Disbursements	885 00 1,201 37		•
_		2,086 37	
Hutton, John		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Johnson, G. N.		516 00	
Johnston, T. Kay, A.		728 00 404 00	
Lee. J. B.		845 00	
Leroy, L. H. Long, H. E.		952 00	
Lowe, W. C.		890 00 340 00	
MacDonald, J. K.		16 00	
Macdonell, R. D. MacGillivray, D. D.		775 00 416 00	
MacNamara, J		700 00	
Manice, Wm Disbursements		1,280 00 401 93	
_			40 452 05
Carried forward		41,956 30	62,156 07

Service.	\$ c.	\$	c.	\$ c.
Brought forward		41,956	30	62,156 07
Wood Ranging.—Continued.				
Margach, J. A	717 00			
Disbursements	16 37	.733	37	
Maughan, J Disbursements		84	30	
Menzies, A		.,		
Molyneaux. G			00	
Mooney, L	905 00 28 10			
Mongrain, Chas		933		
Morel, H		476	00	
Mulroney, W. J. and G Books		9	90	
Murray, Wm	•••••	$\begin{array}{c c} 1,695 \\ 670 \end{array}$		
McCaw, J. G		1,560	00	
McDonald, A	620 00	676	00	
Disbursements	95 70			
McDonald, J. D		$\begin{array}{c c} - & 715 \\ 1,390 \end{array}$		
McDonald, HDisbursements		. 14	00	
McDonald, T				
McGregor, C. F		. 590		
McIvor, J. A		832		
McMillan, J	1	. 352		
McNab, Alex				
McRae, D. A.		108		
Nault, James		. 668		
Nevison, W. H		745		
Niblett, Jas		. 490	00	
Norgate, C		126		
Paul, C. Á.		. 1,111	54	
Pigott, John Purdy, John	• • • • • • • • • •	995		
Revell, L. O		1 565		
Ridley, Robt				
Ross, S		1 190		
Rowe, F. E				
Sanderson, Geo		845		
Sanderson, D		. 105	00	
Shaw, Alf				
Shaw, D. Shields, F.		. 528	00	
Short, J				
Simmons, A. G. Simpson, Wm.		. 624	00	
Sisson, H. P				
Smith, V. Smith, J. D. C.	• • • • • • • • • • • • • • • • • • • •			
	•••••••	. 528		
Carried forward		. 77,531	40	62,156 07

Service.	\$ c.	\$ c.	\$ c.
Brought forward		77,531 40	62,156 07
Wood Ranging.—Concluded.		-	
Spence, D		445 00	•
Stein, Paul	• • • • • • • • • • •	1,111 54 915 00	
Thompson, Harry	· · · · · · · · · · · · · · · · · · ·	409 00	
Thomson, L. H	• • • • • • • • • • • •	110 00 820 00	_
Thorpe, Thos. Tucker, L. A.		620 00	- 1
Urquhart, A		1,090 00	
Vincent, H. T	· · · · · · · · · · · · · · · · · · ·	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Watts, W. B		584 00	
Watts, J. J	• • • • • • • • • • • •	60 00 3 00	
Webster, W. A	· · · · · · · · · · · · · · · ·	300 00	
Western, C	• • • • • • • • • • • • •	365 00	
Whelan, P. J. White, A. T.		1,700 00 485 00	
Wilkins, G. N		475 00	
Wilson, D		885 00 434 81	
Yuill, Thomas	· · · · · · · · · · · · · · · · · · ·	890 00	
Young, R. J	• • • • • • • • • • • • • • • • • • • •	576 00	01 200 75
EXPLORATION AND ESTIMATION OF TIMBER BERTHS.			91,309 75
Beaudry, Bazil		39 00	
Chartrand, Mitchelle	•••••	135 00 903 37	
Huckson, A. H		1,400 13	
Webster, W. A		544 15	
Patterson, Malcolm		$171 00 \\ 195 00$	
			3,387 65
FIRE RANGING.			
Acheson, Lloyd	• • • • • • • • • • • •	$\begin{array}{c c} 14 & 00 \\ 382 & 50 \end{array}$	
Adams, A		377 50	
Allen, T. W		370 00	
Alt, J. C		367 50 325 00	
Armstrong, J. G.		342 50	
Armstrong, T. C. ,	• • • • • • • • • • • •	367 50 262 50	
Bailey, H.		367 50	
Baker, R. O		345 00	-
Bartlett, G. W		380 00 671 99	
Bartlett, E. A		382 50	
Bastien, J		255 00 382 50	
Beddome, W. E		357 50	
Begin, Paul		297 50 377 50	
Belanger, E		372 50	
Belanger, X		178 75	
Bell, D. E		375 00 208 75	

Service.	\$	c.	\$ c.		\$	С
Carried forward			7,760 99		156,858	3 47
FIRE RANGING.—Continued.						
Berry, G. W			200 00			
Berry, Geo.			367 50			
Berrige, C. Bertrand, H.			265 00 407 50			
Biederman, Wm.			340 00			
Bisaillon, J. H			11 20			
	• • • • • •		375 00			
Bissonette, R	• • • • • •		370 00 28 60			
Blair, Bert			20 00			-
Blais, O			372 50			
Bliss, L. E	• • • • • •	• • • • •	1,755 68			
Bookhout, H.		• • • • •	382 50 365 00			
Bottrell, D			380 00			
Bouchard, M			15 00			
Bowin, J			302, 50			
Bowman, J. M. Brant, George	• • • • • •	• • • •	290 00 290 00	-		
Brown, T. E.	· • • • • • • • •	• • • • •	367 50	1		
Brown, Thos.			372 50			
Brown, A	• • • • • •	• • • • •	375 00			
Brozeau, —	• • • • • • •	••••	515 00 397 50			
Brum, A	765		051 00			
Disbursements	883			-		
Down of A			1,648 63			
Brunet, A. Bryan, A. E			372 50 335 00	9		
Buchanan, R. F.			377 50			
Buie, D	592	00				
Disbursements	31	60	622 60	1.		
Buisson, Wm.			623 60 272 50	1		
Burger, Wm.			382 50			
Burns, R			337 50			
Burns, W. S	• • • • • • •	••	612 00			
Campbell, D.		••••	335 00 367 50			
Campbell, Alex			375 00			
Campbell, W. L.			367 50			
Cameron, W. J. Carnochan, G.	· · · · · · ·	••••	387 50			
Cavanagh, S.	• • • • • •	••••	385 00 337 50	İ		
Ceasar, H. P			175 00			
Chaffey, William			375 00			
Chapman, William		• • • •	375 00	1		
Chatson, Fred	•••••	• • • •	370 00 320 00			
Chenier, H			372 50			
Chittick, W. J.			312 50			
Christie, W. P Disbursements	456 0		463 04			
Disbursements	114 0	- 1				
			570 00			
Clark, H			372 50			
Conture, D	• • • • • • •	•••	295 00 314 00			
· · · · · · · · · · · · · · · · · · ·	• • • • • •	• • •	314 00			
Carried forward		I-				

Service.	\$ c.	\$ c.	\$ c.
Brought forward		28,157 74	156,853 47
Fire Ranging Continued.			
Copley, J. D		330 00	
Countryman, J. S		375 00	
Connigham, J		380 00	,
Coyne, Phin.	765 00 103 84	•	
Disbursements	105 64	868 84	
Craigie, H		382 50	
Curry, P. W. M.		342 50	
Dance, H. L		324 00	
Dancey, Wm		318 00	
Danis, D		275 00	
Darlington, E	•••••	222 50 355 00	•
Davidson, Ira		377 50	
Dean, P. C		377 50	22.11
Deagle, E		387 50	
De Laronde, D		247 50	
De Laronde, J		20 00	
Deschamp, N		215 00	-
Deschene, A		365 00	
Dial, A. Ć		367 50	
Didier, H.		125 00	
Dingle, R		380 00	-
Dobbs, G. W		375 00 370 00	1
Dougherty, A. E		270 00	
Doolittle, R		345 00	
Doyle, James		292 50	
Doyle, Gus		375 00	0
Duff, R. A		535 00	
Duffy, Isaac		267 50	
Duncan,_R		363 00	
Dyson, W		375 00	
Edgar, G. R		370 00 382 50	
Elliott, J.			
Ellis, E. C.		1 111 11	
Ellsworth, C. B.		382 50	
English, M		385 00	
Fairbairn, N. H			
Disbursements	83 87	051 05	}
Farrell, S. H	-	651 87	
Farren, S. H			
Ferguson, G			
Ferguson, Thos.			
Fisher, Geo.		564 00	}
Fitzback, John		250 00	
Fitzgerald, R		345 00	
Fitzpatrick, P		32 00	
Flannigan, J			
Flynn, M. Fraser, W. J.			
Fraser, W. J. Fraser, Alex.		365 00	
Fraser, W. A.			
Furry, C.		00= 00	
Gagne, F	765 00		
Disbursements	212 28		
		977 28	
Country days and		47 414 60	150 052 4
Carried forward	1	1 47,414 23	156,853 4

Service.	\$ c.	\$ c.	\$	C.
Brought forward		47,414 23	156,853	4
FIRE RANGING.—Continued.			·	
lalt, R.		357 50		
ale, W. J.		367 50		
arrow, J		387 50		
ault, J		397 50		
authier, Theo.		284 00 365 00		
emmell, John	560 00			
Disbursements	173 85	700.07		
ervais F.	*	733 85 377 50		
iles, F		375 00		•
Illanders, G. K		375 00		
illies, A. E.		312 50		
droux, J. O	• • • • • • • • •	416 20		
lover, E		286 00 375 00		
odin, E		152 50		
oyette, Eug.	•••••	230 00		
roulx, R	••••••	142 50		
ackett, Wm.	•••••	382 50 365 00		
ammond, H		325 00		
ammond. W	}	375 00		
anbury, H. and, Thos		97 50		
anks, F.	• • • • • • • • • • • • • • • • • • • •	548 00 372 50		
anmer, Geo		387 50		
ardy, F		247 50		
ardy, Jargrave, H. R	••••••	190 00		
arper, G.	•••••	345 00 202 00		
arris, Geo	1	375 00		
artley, Chas.		28 95		
ays, Jos	• • • • • • • • • • • • • • • • • • • •	250 00		
enderson, J	L	576 41 365 00		
ennessey, wm.	i	344 00		
eroûx, J.		287 50		
ggins, Robt. II, J. E.	••••••	320 00		
DILIS, J	1	332 50 370 00		
Dimes, J. A	1	367 50		
Jimes, J. H.	1	377 50		
itchinson, Fred.	1	174 00		
nster, J. A		397 50 302 50		
mes. G.		312 50		
		340 00		
nkins, S.	649 00	377 50 .		
Disbursements	642 00 214 00			
	211 00	856 00		
		7 50		
unston, wm.	••••••	337 50		
unson, J.		$\begin{array}{c c} 336 & 00 \\ 14 & 00 \end{array}$		
inston, T.		49 50		
		327 50		
Carried forward	i—			_

Service.	\$	c.	\$	c.	\$_	c.
Brought forward			65,013	14	156,85	53 47
FIRE RANGING.—Continued.						
Kells, Lorn			380	00	,	
Kelly, T				00		
Keily, M. Keith, G. R.				50 00		1
Keenahan, M				50		, 1
77 43.				50		
Kiely, C. A.				00		
Labell, A			305	00		^
Lafontaine, P				00		
Langford, Thos.				2 50 7 50		
Lanktree, J			362	50		
Larocque, M	• • • • • •	- · · · · ·		2 50 5 00		
Leblanc, O	60	0 00	306	00		
Disbursements		8 27 .				
Lechner, H				3 27 2 50	~	
Leggett, C.				50		
Legris, John				15		
Leo, Philip Lee, J. B	83	0 00	3ವರ	00		
Disbursements		8 93			1	
Liddle, H. W			1,348			
Linklater, Wm.		• • • • • •) 00) 00		
Lennox, T. A			380	00	-	
Locheed, R. W				2 50 2 50		
Logan, H.				50		
Long, H. E	79	0 00				
Disbursements	21	0.10	1,000	10		
Loy, Robt				50		
MacDonald, S. C Disbursements Macdonell, R. D				1 45 1 00		
Mack, F				3 00		
MacNeill, E. R				50		
Margach, Wm		• • • • • •	2,419	1 00 1 00		
Marshall, J. A				50		
Manice, Wm	1			55		/
Mattison, G. W		• • • • • •		5 00 7 60	1	
May, H	1	0 00		00		
Disbursements	32	7 75	1 145	7 75		
Menzies, A			1,147 520	00		
Merchant, H			397	7 50		
Merchant, J				00 5 20		
Micholson, J.				00	1	-
Miller, R				00	1	
Mitchell, F		6 00	285	5 00		
Disbursements		4 00			_	
			570	00		
Carried forward	1		84,791	E2	156,85	0 45

Service.	\$	c.	\$	c.	\$ c.
Brought forward			. 84,79	1 53	156,853 47
FIRE RANGING.—Continued.					,
Morand, L			. 38	2 50	
Morel H				0 00	
Morin, J				250	
Moore, B				5 00	
Moorhouse, C. H.				7 50	
Morris, Norman		• • • •	10.	$\begin{array}{ccc} 2&00 \\ 5&00 \end{array}$	
Morris, Nelson D.				3 75	
Morris, D. D.				0 00	
Murray, C. A. B				5 00	
McArthur, J. A			34	7 50	
McAuley, W. D				2 00	
McCaffrey, L. E.				66	
McCallum, A				2 50	
McColl, Wm				7 50	
McConnell, E				2 50	
McCulloch, T	• • • • • • •	• • • • •	91	7 50 2 50	
McDonald, Ed.	• • • • • • •		230	00	
McDonald, T			304	00	•
McDonell, L. P.			19	00	
McEwen, H. A.				00	
McIntosh, Jas			372	2 50	
McKay, Alex.				00	
McKechnie, J. N.				00	
McKenzie, A				50	
McKinnon, H				00	İ
McLarin, W. A				50 50	
McLean, M.				00	
McLeod, F. W.				00	
McMillan, J. J.				00	
McMullen, S. J.				50	
McMurry, John				50	
McPhee, D. J			355	00	
McPherson, Jas.				00	
McQuade, H				00	1
McQuin, W. J.				00	1
McRae, D. A	• • • • • • • •	• • • •		00	
McRae, Ross	• • • • • • • •	• • • •	392	50 50	
Newburn, Wm.	• • • • • • • •	• • • • •	560		
Vetemegesia, A.		····		00	
Nockwenogis, L	• • • • • • • • • • • • • • • • • • •			00	
Northcott, A			375		
Oldfield, A			152	50	
Oliver, J. A			267		
Orange, W. H.			115		
Ouelette, F.		• • • •	375		
Paterson, H. L.	• • • • • • •	• • • •		50	
Patterson, Bert	• • • • • • •	• • • •	382		
Poulin, N.	• • • • • • •	• • • •	387 360		
Priest, A. H.	•••••	• • • •	370		
Prestley, J.			312		
ringle, A			375	00	
Pritchard, F			445		
ronge, L		1	352		
Proulx, A			387		
uilty, T. J.			375	00	1
Carried tonward			101 015	F 1	450
Carried forward	• • • • • • •		104,045	54	156,853 47

Service.	\$ c.	\$ c.	\$ c.
Brought forward		. 104,045 54	156,853 47
FIRE RANGING.—Continued.			1 = 1
Rabbitts, Max		. 608 00	
Racey, M. J.		. 367 50	
Radcliffe, C. A		. 354 75 . 382 50	
Ranger, A		392 50	
Read, C. F	397 50	-	
Disbursements	10 00	407 50	*
Readman, R. E			
Redden, M. J		. 385 00	
Reed, C. D			
Retty, James			
Reeve, E. M		. 360 00	_ 1
Reeves, E. H			
Ridley, Robt Richardson, J		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Richardson, J. S		367 50	
Ritchie, J. A.		404	3
Robertson, Wm	• • • • • • • • •		
Rodden, M. J.			
Row, James		. 382 50	
Rusk, O	805 00 1,742 98		
	1,142 90	2,547 98	
Russell, Alex.		1	1
Ryan, Thos	• • • • • • • • • • • • • • • • • • • •	1 0=0 00	
Saunders, H,		357 50	
Saunderson, S. L		. 300 00	
Savard, A	• • • • • • • • • • • • • • • • • • • •	. 377 50 377 50	
Scott, Robt.		. 568 00	
Seymour, J		382 50	
Shields, H. Shields, F	• • • • • • • • • • • •	365 00 10 00	
Shilling, Harry		292 00	
Short, J		. 94 50	
Skune, B	• • • • • • • • • • • •	302 50 365 00	
Small, M. A.		367 50	
Smith, E. J		367 50	
Smith, E. J.		258 75	_
Smith, H. S. Smyth, Wm.	•••••••	365 00 172 50	
Solomon, J		202 00	
Spearing, F.		342 50	
Spence, A			
Spillett, J. J.		00==0	
Spillett, A. F		367 50	
Stark, W		372 50 370 00	
Stephens, S. J	820 00	910 00	
Disbursements	859 25	1 070 115	
Stowert Ches		1,679 25 370 00	
Stewart, Chas		055 00	
.,			

Service.	\$ c.	\$ c.	\$	c
Brought forward		125 205 02 4	156 959	
FIRE RANGING—Concluded.	••••••	120,200 02 4	156,853	4
		0=0 =0		
Stevens, Alex.	• • • • • • • • • • • •	372 50		
Stevenson, R	• • • • • • • • • • • •	375 00		
Storey, V. H	•••••	330 00 372 50		
Strain, J.	• • • • • • • • • • • •	267 50		
Superior Construction Co.		188 96		
Thomas, Phil		400 00		
Thomas, E. G		370 00		
Thompson, G. S.	564 00			
Disbursements	228 95			
; -		792 95		
Tighe, F. J		460 00		
Tooke, S.	• • • • • • • • • • • •	375 00		
Toomer, Sam.		375 00		
	• • • • • • • • • • •	352 50		
Fower, O	• • • • • • • • • • •	604 00		
Frembaly, E	•••••	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Furney, W. J.		332 50		
Tye, R. H.		535 00		
rwigg, J. F.		302 50		
Jrquhart, A.		548 00		
Valois, Pat.		367 50		
Valker, G		370 00		
Valker, Geo.		365 00		
Wallace, Jas		382 50		
Wallace, W. C		212 50		
Warner, H. B.		377 50		
Washburn, B		372 50		
Watson, A		307 50		
Watts, Geo		279 13 387 50		
Vease, A		370 00		
Weir, G. A		375 00		
Vest, W. H.		370 00		
		367 50		
Velch, J		337 50		
Whalley, H		307 50		
Vhite, R		75 00		
Vhiteoak, D	•••••	375 00		
Vhytock, H		372 50		
Vickens, H	• • • • • • • • • • • • • • • • • • • •	346 50		
Villiams, R. A	••••••	390 00		
Villiams, R. E	••••••	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Vilson, H. J.		190 00		
Vilson, L		45 50		
Vilson, J. G.		367 50		
Vilkins, G. N.		560 00		
Vindell. Jas		. 608 00		
/ing, R. H		300 00		
Vooden, John		260 00		
Toodcock. Geo		460 00		
right, A	• • • • • • • • • • • • • • • • • • • •	360 25		
ragard, comment of the contrac	• • • • • • • • • •	382 50		
		297 50		
		$\begin{array}{c c} 380 & 00 \\ 175 & 00 \end{array}$		
oung, Jesse		110 00	145,500 8	21
	1		* 40,000 O	, 1

Service.	\$ c.	\$ c.	\$ c.
Brought forward			302,354 28
Forest Reserves.			
Temagami Reserve—\$46,326.93.			
		275 00	
Albright, L		375 00 375 00	• • • •
Allan, W. N		350 00	•
Baldwin, J. F		250 00 322 50	
Barrett, Thos.	785 00	322 30	
Disbursements	146 23	021 22	
Beatty, J. S.		931 23 332 50	
Bedford, H		357 50	
Benoit, Ed		367 50 367 50	
Bertrand, O		375 00	¥
Bissette, J		372 50	e _{leg}
Boivin, H		372 50 332 50	
Brook, J. H.		0-0-0	-
Brown, J. F		167 50	
Champagna I		372 50 372 50	
Champagne, I		347 50	
Clement, F. W		335 00	
Coombs, F. H		340 00 357 50	
Corbett, G. E.		372 50	
,,		357 50	-
Davidson, R. D	• • • • • • • • • •	372 50 370 00	
		260 00	
	 .	357 50 357 50	
Ellis, R. A. Evans, J. J.		247 50	
		1,061 50	
	• • • • • • • • • • • •	335 00 340 00	
Ferguson, N. C		332 50	-
Forsyth, G		307 50	
Gauthier, O		372 50 327 50	-
Gibson, G. A. L		350 00	
Grenier, Jas		372 50	
Haight, B		355 00 357 50	
		372 50	
Harrison, J.	• • • • • • • • • • • • •	. 372 50	
Harrison, W		372 50 42 58	
Herlihy, D		367 50	
Herrick, C. P		372 50 370 00	
Higgins, L. Hindson, C. E.	1,300 00	3,0 00	
Disbursements	1,247 02	9 547 09	÷
Holstein, A.		$egin{array}{cccc} 2,547 & 02 \\ 360 & 00 \\ \end{array}$	
		172 50	
Johnson, W. J.	• • • • • • • • • • • • •	345 00	
Carried forward	• • • • • • • • • • • • • • • • • • • •	21,047 33	302,354 2

Service.	\$ c.	\$ c.	\$ c
Brought forward		. 21,047 33	302,354 28
Forest Reserves.—Continued.			
Temagami Reserve.—Continued.			
Keats, G.		52 50	
Keenan, J.			
Kennedy, W		0.4-	
Kirkup, N. B.			
Lamarche, A	1	000 00	
Larmour, R. R.	1		
Latoure, John			
Lewis, G. T			
Livingstone, J			
Lyon, J. W		050.50	
Mansfield, J.		1 000 00	
		317 50	
Melville, R			
Montgomery, A		01000	
Montriuel, Joe			
Morel, H		0 = 0 = 0	
AcCadden, P.		1 222	
McClennaghan, A. R		372 50	
McKay, A		367 50	
		362 50 330 00	
Vadon, P.		372 50	
Veil, W		372 50	
		372 50	
'Neil, W. S		372 50 375 00	
Papineau, JoePassmore, S		372 50	
Perron, M.		220 00	
Philpot, G. N		340 00	
owell, John		372 50	~
Reid, J. T		332 50 335 00	
Robertson, N. S		912 50	
Rochon, F		372 50	
Rowntree, C. E		305_00	
Russell, F	• • • • • • • • • • • • • • • • • • • •	372 50	
age, P	• • • • • • • • • • • • • • • • • • • •	370 00	
asseville, J. cott, J. K.	• • • • • • • • • • • • • • • • • • • •	$\begin{bmatrix} 207 & 50 \\ 287 & 50 \end{bmatrix}$	
hannon, P. R.		340 00	
helson, H		367 50	
impson, Theo.		370 00	
mith, F. R	• • • • • • • • • • • • •	345 00	
mith, C. E. parks, W. E. L.	• • • • • • • • • • • • • • • • • • • •	$\begin{vmatrix} 285 & 00 \\ 345 & 00 \end{vmatrix}$	
		357 50	
tevenson, G. H		345 00	
Sutton, Fred		370 00	
Chorley, C. W.	• • • • • • • • • • • • •	370 00	
'ivaris, D. 'ivaris, M.	• • • • • • • • • • • • • • • • • • • •	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
vagner, H. W	. 	375 00	
Vestman, L. E	• • • • • • • • • • • • •	340 00	

Brought forward		J	
Dioagno joi wai a	• • • • • • • • •	42,329 8	302,354 28
Forest Reserves.—Continued.			
Temagami Reserve.—Concluded.			
Western, C		372 50	0
White, J Whitney, K. H		305 0	0
Wender, Alf. Williams, C.		372 50	0
Willons, C. EWilloughby, J. B		292 50 327 50	
Wilson, H. P. Wilson, B.		375 0	0
Young, R. J. Disbursements	790 00 62 10		
Dispursements	02 10	852 1	0
Metagami Reserve, \$8,882.88.			- 1
Briggs, A. V	905 00		0
Disbursements	302 88		0
Butterfield, J			0
Cromarty, R. P. Dixon, H. A.		347 5	0
Hughes, J. E. L. Jefferies, W. G.		275 0	0
Lawrence, C. F			
Marchell, I			
McCandless, J. W			
McIntyre, J. S. Ogg, C. S.		360 0	0
Porter, C. H		357 5	0
Reid, J		347 5	0 .
Stirrett, H. C. Taylor, W. J.		390 0	0 -
Taylor, J. S	1	390 0	0
Vowles, F. J.		347 5	0 .
Mississaga Reserve, \$12,680.63.			
Alian, GeorgeBelanger, Thos			
Belaney, Archie		392 5 395 0	0
Bickeil, R. R. Boyd, D. J.		367 5	0
Burden, J. H. Burden, Wm.		387 5	0
Cameron, Bruce			
Copp, F. C		390 0	00
Carried forward			

Porest Reserves.—Concluded.	Service.	\$ c.	\$ c.	\$ c.
Duval, C. A.	Brought forward	• • • • • • • • • • • • • • • • • • • •	59,454 81	302,354 28
Duval, C. A. S45 00 Disbursements 355 78 1,200 78 2,200 No. 1,200 78 2,200 No. 2,200	Forest Reserves.—Continued.			
Disbursements	Mississaga Reserve.—Concluded.			
Dyson, Isaac	Duval, C. A		1 200 78	
Murphy, J. W. 370 00 Putney, A. F. 365 00 Sawyers, C. E. 372 50 Taylor, J. R. 332 50 Wright, H. V. 370 00 Young, William 12 50 Disbursements 12 35 Nepigon Reserve, \$12,264.73. Allan, J. B. 297 50 Blair, Bert 430 00 Bliss, L. E. 920 00 Disbursements 2,993 98 Bouchard, J. 485 00 Bouchard, M. 117 50 Burns, W. S. 480 00 Coombs, J. 50 00 Coombs, J. 50 00 Couch, R. 367 50 Copley, J. D. 30 00 DeLaronde, D. 30 00 Ferris, R. 370 00 Fraser, G. 362 50 Harper, G. 362 50 Harper, G. 30 00 Harris, R. 47 50 Husband, A. C. 277 50 Judge, S. E. 400 00 King, G. E. 337 50 Lafontaine, Paddy 67	Esson, Thomas Eveline, H. Eveline, A. Eveline, Stanley Featherstonehaugh, M. H. Findlayson, C. Garrett, F. A. Hall, Thomas Haskett, K. R. Hodder, F. Hope, L. S. Jean, A. Knox, D. McCallum, A. J. McClelland, R. S.		197 50 372 50 372 50 225 00 390 00 365 00 372 50 392 50 367 50 52 50 282 50 382 50 357 00 358 50	•
Blair, Bert 430 00 Bliss, L. E. 920 00 Disbursements 2,993 98 Bouchard, J. 485 00 Bouchard, M. 117 50 Burns, W. S. 48 00 Coombs, J. 50 00 Couch, R. 367 50 Copley, J. D. 30 00 DeLaronde, D. 30 00 Ferris, R. 370 00 Fitzpatrick, P. 280 00 Fraser, G. 362 50 Hardy, F. 30 00 Harris, R. 327 50 Harper, G. 30 00 Higgins, R. 47 50 Husband, A. C. 277 50 Judge, S. E. 400 00 King, G. E. 337 50 Lafontaine, Paddy 67 50	Murphy, J. W. Putney, A. F. Sawyers, C. E. Taylor, J. R. Wright, H. V. Young, William Disbursements	12 50	370 00 365 00 372 50 332 50 370 00	
Bouchard, J. 485 00 Bouchard, M. 117 50 Burns, W. S. 48 00 Coombs, J. 50 00 Couch, R. 367 50 Copley, J. D. 30 00 DeLaronde, D. 30 00 Ferris, R. 370 00 Fitzpatrick, P. 280 00 Fraser, G. 362 50 Hardy, F. 30 00 Harris, R. 327 50 Harper, G. 30 00 Heffernan, J. J. 402 50 Higgins, R. 47 50 Husband, A. C. 277 50 Judge, S. E. 400 00 King, G. E. 337 50 Lafontaine, Paddy 67 50	Blair, Bert Bliss, L. E.	920 00	430 00	
Carried forward 76.592 42 302.354 29	Bouchard, M. Burns, W. S. Coombs, J. Couch, R. Copley, J. D. DeLaronde, D. Ferris, R. Fitzpatrick, P. Fraser, G. Hardy, F. Harris, R. Harper, G. Heffernan, J. J. Higgins, R. Husband, A. C. Judge, S. E. King, G. E.		485 00 117 50 48 00 50 00 367 50 30 00 370 00 280 00 362 50 30 00 327 50 30 00 402 50 47 50 277 50 400 00 337 50	
302,001	Carried forward		76,592 42	302,354 28

FOREST RESERVES.— Concluded. Nepigon Reserve.—Concluded. Linklater, Wm. 325 00 Lower, A. R. 325 00 McDowell, T. W. 312 50 Monahan, P. 355 00 Pigeon, C. 392 50 Rae, A. 485 00 Ritchie, S. 317 50 Sadsbury, Martin 567 75 Sadsbury, Martin 567 75 Socott, C. V. 332 50 Shilling, H. 67 50 Solomon, J. 30 00 Young, N. M. 347 50 Eastern Reserve, \$2,941.56. Brown, Geo. 382 50 Drysdale, S. 377 50 Egan, Wm. Disbursements 21 40 Shultz, J. 382 50 Shillitz, J. 382 50 Stewart, Wm. 382 50 Tapping, Thos. 566 00 Disbursements 64 16 Young, Geo. 382 50 Sibley Reserve, \$835.00. Hornick, Geo. 367 50 Quetico Reserve, \$4,077.00. Bone, H. 280 00 Gadd, H. 280 00 Gadd, H. 280 00 Gadd, H. 280 00 Gribson, W. T. 280 00 Gibson, W. T. 280 00 Gibson, W. T. 280 00 Gibson, W. T. 280 00 Gardid, H. 280 00 Gribson, W. T. 280 00 Gribson, W. T. 280 00 Gribson, W. T. 280 00 Gribson, W. T. 280 00 Gribson, R. G. 280 00 Leham, W. 280 00 Gardnin, E. 277 50 Leham, W. 280 00 Aartin, E. 277 50	Service.	\$	C.	\$	c.	\$ c
FOREST RESERVES.— Concluded. Nefigon Reserve.—Concluded. Linklater, Wm	Brought forward			76,592	42	302,354 2
Linklater, Wm	Forest Reserves.— Concluded.		•			_ =
Lower, A. R	Nepigon Reserve.—Concluded.					6
Brown, Geo	Lower, A. R. McDowell, T. W. Monahan, P. Pigeon, C. Rae, A. Ritchie, S. Sadsbury, Martin Scott, C. V. Shilling, H. Solomon, J.			325 312 355 392 485 317 567 332 67	00 50 00 50 00 50 75 50 50	
Drysdale, S. 377 50 Egan, Wm. Disbursements 21 40 Shultz, J. 382 50 Snider, L. 382 50 Stewart, Wm. 382 50 Tapping, Thos. 566 00 Disbursements 64 16 Young, Geo. 382 50 Sibley Reserve, \$835.00. 382 50 Hornick, Geo. 367 50 Oliver, J. A. 100 00 Quinn, J. J. 367 50 Quetico Reserve, \$4,077.00. 280 00 Bone, H. 280 00 Gadd, H. 280 00 Gibson, W. T. 280 00 Johnson, R. G. 280 00 King, A. 275 00 Leham, W. 280 00 Martin, E. 277 50	Eastern Reserve, \$2,941.56.					- 75
Sibley Reserve, \$835.00. Hornick, Geo. 367 50 Oliver, J. A. 100 00 Quinn, J. J. 367 50 Quetico Reserve, \$4,077.00. 280 00 Bone, H. 280 00 Darby, W. 280 00 Gadd, H. 280 00 Gibson, W. T. 280 00 Johnson, R. G. 280 00 King, A. 275 00 Leham, W. 280 00 Martin, E. 277 50	Drysdale, S. Egan, Wm. Disbursements Shultz, J	566	3 00	377 21 382 382 382	50 40 50 50 50	
Hornick, Geo. 367 50 Oliver, J. A. 100 00 Quinn, J. J. 367 50 Quetico Reserve, \$4,077.00. Bone, H. 280 00 Darby, W. 280 00 Gadd, H. 280 00 Gibson, W. T. 280 00 Johnson, R. G. 280 00 King, A. 275 00 Leham, W. 280 00 Martin, E. 277 50	Young, Geo			382	50	
Oliver, J. A. 100 00 367 50 Quetico Reserve, \$4,077.00. Bone, H. 280 00 280 00 Gadd, H. 280 00 Gibson, W. T. 280 00 Johnson, R. G. 280 00 Leham, W. 275 00 Leham, W. 280 00 Martin, E. 280 00 Martin, E. 277 50	Sibley Reserve, \$835.00.					
Bone, H. 280 00 Darby, W. 280 00 Gadd, H. 280 00 Gibson, W. T. 280 00 Johnson, R. G. 280 00 King, A. 275 00 Leham, W. 280 00 Martin, E. 277 50	Oliver, J. A			100	00	
Darby, W. 280 00 Gadd, H. 280 00 Gibson, W. T. 280 00 Johnson, R. G. 280 00 King, A. 275 00 Leham, W. 280 00 Martin, E. 277 50	Quetico Reserve, \$4,077.00.	-				
McDonald, A. 275 00 Sexsmith, R. 277 50 Sturdy, R. 280 00 Wall, Geo. 452 00 Wall, S. 280 00	Darby, W. Gadd, H. Gibson, W. T. Johnson, R. G. King, A. Leham, W. Martin, E. McDonald, D. McDonald, A. Sexsmith, R. Sturdy, R. Wall, Geo.			280 280 280 280 275 280 277 280 275 277 280 452	00 00 00 00 00 00 50 00 50 00 50 00	20.000.50
88,00						88,008 73

Appenaix No. 6.—C	(1
Service.	\$ e.	\$ c.	\$ c.
Brought forward FORESTRY.			390,363 01
Newman, F. S., Assistant Forester, services one		122.24	
month Brock, John, Purchase of S. ½, N. ½, Lot 24, Con. 5, Township of Walsingham Bell Telephone Company Express	20 50	1,000 00	
Labor			7,408 58
MINES AND MINING.			
Miller, W. G., Provincial Geologist, services Disbursements	4,350 00 245 95	4,595 95	
Knight, C. W., 1st Assistant Geologist, services Disbursements	2,150 00 304 29		
Burrows, A. G., 2nd Assistant Geologist, services Disbursements	2,050 00 288 41	2,454 29	
Hopkins, P. E., 3rd Assistant Geologist, services Disbursements	1,250 00 176 83	2,338 41	
Mickle, G. R., Mine Assessor, services	4,000 00 710 50	1,426 83	
Godson, T. E., Mining Commissioner, services Dance, R. W., Mining Commissioner's Clerk, ser-	3,857 54	4,710 50	
vices	1,400 00 1,422 43	6,679 97	
Corkill, E. T., Inspector of Mines, services	1,875 00 531 00	2,406 00	
Sutherland, T. F., Inspector of Mines, services Disbursements	2,350 00 1,365 50		
Collins, E. A., 1st Assistant Inspector of Mines, services	1,672 80 1,146 74	3,715 50	
McMillan, J. G., 2nd Assistant Inspector of Mines,		2,819 54	
Rogers, R. W., Topographer, services Disbursements	1.750 00	127 48	
McArthur, T. A., Inspector of Recorders' Offices, services	600 00 444 03	1,807 20	
Coleman, Dr. A. P., Disbursements Barfoot, Thos. Bell, Wm. Parsons, A. L., Disbursements Rothwell, T. E., Disbursements Scott, John Disbursements		1,044 03 165 10 167 89 251 35 101 90 33 30	
		926 25	
Carried forward		35,771 49	397,771 59

V-17	,		
Service.	\$ 0	s. \$ c.	\$ c.
Brought forward		35,771 49	397,771.59
MINES AND MINING.—Concluded.			
Sharpe, Donald	700 0 312 2		6.
Smith, R. M	375 9 30 0		
Webster, Jas. E. Young, Roy W. Express King's Printer Micklethwaite, F. W.		197 50 6 05 130 32	
MINING RECORDERS,			37,553 94
Bowker, S. T., Recorder	1,000 00 346 08		
Campbell, C. A., Recorder Washburn, H. C., Clerk Glazier, M. B., Clerk Young, Miss E., Stenographer Disbursements	900 00 720 00 124 62 505 00 398 38		-
Gauthier, G. H., Recorder Graham, F. W., Clerk Glazier, M. B., Clerk O'Brien, J. D., Clerk Disbursements	1,500 00 1,200 00 450 00 1,020 00 1,140 67		
Hough, J. A., Recorder Browning, A. J., Clerk Glazier, M. B., Clerk Gardiner, Miss I. M., Stenographer Disbursements	1,200 00 929 16 450 00 451 00 654 12		
McQuire, H. F., Recorder	500 00 164 08		
Morgan, J. W., Recorder Disbursements	1,000 00 313 70		
Sheppard, H. E., Recorder Disbursements	1,000 00 228 05		
Skill, A., Recorder	1,200 00 157 15		
Carried forward	• • • • • • • • • • • • • • • • • • • •		435,325 53

Service.	\$ c.	\$ c.	\$ c.
Brought forward		17,552 01	435,325 53
MINING RECORDERS.—Concluded.			
Smith, G. T., Recorder Meagher, T. J., Clerk Sarsfield, J. M., Clerk Ferguson, L. H., Clerk Monroe, Miss E., Stenographer Smith, Miss M. H., Stenographer Disbursements	2,300 00 525 00 1,100 00 959 96 720 00 486 23 1,034 69	7,125 88	
Spry, W. L., Recorder Disbursements	682 20 20 20	702 40	
Express Harcourt, E. H., Co. King's Printer Methodist Book Room	140 75 72 86 598 31 112 54	924 46	26 204 75
Provincial Assay Office.			26,304 75
McNeill, W. K. Disbursements	1,714 10 68 70	1,782 80	
Rothwell, T. E. Disbursements	1,009 00 350 60	1,359 60	
Supplies		343 20 76 90	3,562 50
CULLERS' ACT.			0,002 00
Currie, D. H., services		8 00 32 35	40 35
Nicol, Wm., Salary and Disbursements re Toronto Exhibition	55 00 35 40	400 00 137 30	
r		90 40	627 70
Surveys			89,123 51
Board of Surveyors		1	200 00
EXPERIMENTAL TREATMENT OF ORE			200 00
Refunds—Miscellaneous	1		
do Algoma Central Railway			108,033 27
Carried forward			663,417 61

Appendix No. 6.—Concluded.

Service.	\$ c.	\$ c.	\$ c.
Brought forward		• • • • • • • • • • • • • • • • • • • •	663,417 61
Contingencies.			
Departmental.		Ì	
Printing and Binding	2,139 40 5,909 41	8,048 81	
Postage	1,775 95 434 90	2,210 85	
Telegraphing	481 38 38 55 40 00	559 93	
Subscriptions	309 40 3,673 92	3,983 32	*
Typewriters, rent and repairs Hearst, Hon. W. H., Travelling expenses Rorke, L. V., Travelling expenses Stewart, A. M., Legal fees White, Aubrey, Travelling expenses Zavitz, E. J., Travelling expenses	300 00 97 69 110 00 30 25 246 75	215 25 784 69	
Extra Clerks	4,491 68 81 36	4,573 04	20,375 89
BUREAU OF MINES.			, , , , , ,
Printing and Binding	2,467 30 3,715 30	6,182 60	
Postage Telegraphing Express and cartage Advertising Subscriptions Maps	475 16 232 37 61 80 1,051 80 405 68 2,685 90		
		4,912 71	
Gibson, T. W., Travelling expenses Typewriters, repairs, etc. Bell Telephone Company	128 00 8 60	35 35	
Legal fees Nicholas, F. J., Preparing index Sundries	299 67 255 00 436 20	136 60 990 87	
	ŀ		12,258 13
		1	696,051 63

D. GEO. ROSS, Accountant. AUBREY WHITE, Deputy Minister, Lands and Forests.

Appendix No. 7.

Statement of Expenses on account of various Services under the direction of the Department of Lands, Forests and Mines, for the year ending October 31st, 1913.

Service.	\$ c.	\$ c.	\$ c.
ALGONQUIN PARK			21,554 09
VETERANS' COMMUTATION			450 00
EXPLORATION PARTY IN NEW TERRITORY			2,932 64
NORTHERN DEVELOPMENT			•
Bruce, A. E. D., do Stewart, L. D. N., do Lang, J. L., do Laird, R., do Chalmers, D., do Robinson, W. J., do Moore, J. do Mills, W. W., do Fraser, J., do Beardall, F. G., do Laidlaw, Miss B., do Extra Clerks Wages Contracts Supplies 33	4.409 02	- 20,878 65 -1,060,293 63	1,081,172 28
BOUNTY ACT VII., EDWARD VII., CAP. 14. Coniagas Reduction Company		998 07	14,362 59
		•	1,120,471 60

D. GEO. ROSS, Accountant.

AUBREY WHITE, Deputy Minister of Lands and Forests.

Appendix No. 8.

WOODS AND FORESTS.

Statement of revenue collected during the year ending October 31st, 1913.

•		\$	c.
Amount o	f Western collections at Department	1,753,022	84
do	Belleville collections	19,454	12
do	Ottawa collections	206,648	85
	j	1,979,125	81

J. A. G. CROZIER, Chief Clerk in Charge. AUBREY WHITE, Deputy Minister.

Appendix No. 9.

PATENTS BRANCH.

Statement of Patents, etc., issued by the Patents Branch from 1st November, 1912, to 31st October, 1913.

ublic Lanus	àte Crown)	8
-	late School)	
66 (6	late Clergy Reserves)	
"	University)	:
	ds (A.A.) (This series now discontinued)	_
66 66	' (Act of 1880) discontinued	2
66 66	' (Act of 1913)	2
**	' (Act of 1901) (Veterans)	9
ining Lands		8
	(University)	
ining Leases		2
rown Leases		
	cupation	
	ses	
$ine \dots$		
	Total	3.5

CHARLES S. JONES, Chief Clerk. AUBREY WHITE,
Deputy Minister.

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

	Area covered		Saw log	s.	
Agencies.	by timber licenses.	P	ine.	. Otl	ner.
	Square miles.	Pieces.	Feet B.M.	Pieces.	Feet B.M.
Western Timber District Belleville Timber District Ottawa Timber	12,485 3 957 1	7,230,192 73,071	280,810,994 1,838,987	1,129,176 295,791	34,133,013 9.815,144
District	4,0764	1,259,035	56,152,030	583,617	14,755,269
	17,519 1	8,562,298	338,802,011	2,008,584	58,703,426

General Statemen

	Cord	Cordwood.		Railway	Posts.	Poles.	Stave	
Agencies.	Hard.	Soft.	Bark.	Ties.	1 03 03.	1 0103.	Bolts.	Pulpwood,
	Cords.	Cords.	Cords.	Pieces.	Cords.	Pieces.	Cords.	Cords.
Western Timber District Belleville Timber	30,927½	37,095	3,725	6,321,675	2	1,291	2,874	120,159
District Ottawa Timber			78½	1,399	75	957		13
District		1,999	705	32,754	123	2,473	• • • • • • • • • • • • • • • • • • • •	11,262
	30,927½	39,094	4,508½	6,355,828	893	4,721	2,874	131,434

J. A. G. CROZIER, Chief Clerk in Charge

No. 10.

FORESTS.

Rent and Bonus during the year ending 31st October, 1913.

DESCRIPTION OF TIMBER.

Во	oom and Dir	nension 7	limber.	Square Timber. Piling.				Cedar.	
P	ine.		Other.						
Pieces.	Feet B.M.	Pieces.	Feet B.M.	Pieces.	Cubic feet.	Lineal feet.	Pieces	Ft.B.M.	Lineal feet.
97,489	13,041,766	52,299	3,831,073	10,349	511,490	512,640	10,627	701,061	122,907
1,411 15,328	• '	4,692 7,142							1,296
114,228	15,458,077	64,133	5,492,549	10,349	511,490	512,640	10,627	701,061	124,203

of Timber.-Concluded.

Amounts accrued.

Trans- fer bonus.	Interest.	Trespass.	Timber dues.	Bonus.	Deposits timber sales 1913.	Ground rent.	Total.
\$ c. 6,770 00	\$ c. 8,456 11	\$ c. 17,324 66	\$ c. 1,155,437 92	\$ c. 614,227 86	\$ c. 101,940 50	\$ c. 70,282 00	\$ c. 1,974,439 05
70 00	60 65	1,301 48	11,389 26			4,990 00	17,811 39
3,660 25	498 81	998 88	105,989 18			23,825 00	134,972 12
10,500 25	9,015 57	19,625 02	1,272,816 36	614,227 86	101,940 50	99,097 00	2,127,222 56

AUBREY WHITE,
Deputy Minister.

Appendix No. 11.

Statement of work done in the Military branch of the Department of Lands, Forests and Mines, during the year 1913.

References for Veteran Patents issued	844
Locations under military certificates	146
Certificates applied in payment of lands	
Certificates surrendered for commutation money	9
Letters received	350
Letters written	160
Special letters to agents	800
Special letters to mining recorders	250
Maps and reports supplied to veterans	400
Printed forms	200
Copies of Veteran Act supplied	450·

H. E. JOHNSTON, Chief Clerk in Charge. AUBREY WHITE,
Deputy Minister.

Appendix No. 12.

Statement of the number of Letters received and mailed by the Department in 1910-11, 1911-12 and 1912-13.

		Let	ters receiv	ed.		•			s and from
Year,	Sales and Free Grants.	Surveys.	Woods and Forests.	Mines.	Totals.	Names indexed.	Orders-in-Council	Returned letters.	Letters, circulars reports mailed f Department.
1910-11	24,705	14,478	9,212	8,220	56,615	63,200	180	94	67,150
1911–12	20,050	10,150	7,700	8,750	50,407	57,000	150	76	_63,125
1912-13	27,658	11,775	7,219	8,800	55,452	61,500	150	75	65,280

FRANK YEIGH, Registrar, AUBREY WHITE,

Deputy Minister.

Appendix No. 13.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold of lots resumed for non-performance of the settlement duties and of patents issued in Free Grant Townships during the year ending 31st October, 1913.

. Township.	District or County.	A	gent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Baxter Brunel Cardwell Chaffey Draper Franklin Freeman Macaulay	Muskoka	J. B. Brown, " " " " " " "	Bracebridge " " " " " " " " " "	6 5 1 3 3 4	395 500 106 297 479 610	11 21	70	3 3 3 6 1	1 2 3 1 19
Medora Monck Morrison Muskoka McLean Oakley Ridout Ryde Sherborne Sinclair		" " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " "	1 3 1 3 5 2 2 4	95 377 200 491 603 273 200 451 458	3 1 8 5 1		1 1 1 5 1 1 1 1 2	1 9 3 1 2 3 1 2
Stephenson Stisted Watt Wood	" "	"	"	1 1 7	198 60 97 1,187	1 1 20	25~	2	22
Burpee Carling Christie Conger Cowper Ferguson Foley	Parry Sound	F. R. Powell	, Parry Sound. " " " " " "	11 13 16 	600 1,700 1,611 2,306	i 	44	7 9 13	2 2 5
Hagerman Harrison Henvey Humphrey McConkey McDougall	66 66 66 68	16 16 16 16	11 11 11 11	11 5 6	201 1,074 578 584 896	2	39	1 6	11 2 11 3 3 3 3
McKellar McKenzie Monteith Shawanaga Wilson	66 06 66 66	66 66 66	66 66 66	6	301 844 200	2	2	2	5 2 7 11
Croft	Parry Sound .	Dr. J. S. Fr	eeborn, Magnet awan " " " "		447 500 832 200 1,196 1,315	1 2	147	4 2 2 3	1 2 1 7 2 1

Appendix No. 13.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Pringle	Parry Sound	Dr. J. S. Freeborn, Magnet- awan.		1,748	3	94	9	1
Ryerson	"	**	3			34	2 1	2 4
Spence	: "	"""	1				1	4
Strong	. "	" "	4	599	•••	• • • • • • •	2	2
Armour	Parry Sound	W. Jenkin, Emsdale	4	428	1	7	5	1
Bethune	"	64 64	3		٠٠.		1	• • • • •
Joly McMurrich			5 3	767 551	3	59	1	9
Perry	"	" "	ĭ				-1	5 2 1 7
Proudfoot	"	"	5	563	2	22	2	7
Hardy	Parry Sound	H. J. Ellis, Powassan	3	300			1	1
Himsworth	"	" "	17	2,510	4	59	14	12
Laurier	**	66 66	ļ <u>.</u>		1	15		7
Nipissing Patterson			6 2	869 200	8 1	35 8	_4	9 1
			ے ا	200	1	0	• • • •	1
Bonfield	Nipissing	W. J. Parsons, North Bay	11	1,274	2	7 3	6	5
Boulter (pt)				1 606	• • •	•••••	• • • • •	1 16
Chisholm Ferris		66	15 27	$\frac{1,686}{2,947}$	5	1043	$\frac{7}{21}$	12
					۱			
Anson	Haliburton	R. H. Baker, Minden	$\frac{2}{1}$	198	• • •	• • • • • • •	••••	2
Glamorgan Hindon	•	" "	1	166 102			1 1	1
Lutterworth	**		6	602	2	92	3	4
Minden	66		3	200	1	100	4	1
Snowdon Stanhope		46 46	3 1	300 101	• • •	••••••	1	4 1 2 2
Staunope				101			• • • • •	2
Anstruther	Peterboro'	William Hales, Apsley	1	203			2	1
Burleigh, N.D.		" "	• • • •	• • • • • • • • • •	• • •	• • • • • • • • • • • • • • • • • • • •	• • • •	2 1
Chandos	**	66 66	$\frac{\cdots}{2}$	245		• • • • • • •	2	-2
Methuen	11	· " "					ī	
01:00	77 117 4	T 77713 777		050				
Cardiff	Peterboro'	James Wilson, Kinmount	2 2	$\begin{array}{c} 270 \\ 198 \end{array}$	···ż	62	2	4
Galway	Peterboro'	" "	11	1,294	2	53		3
Monmouth	Haliburton	** **	7	1,101			2 4	5
Bangor	Hastings	W. J. Douglas, Greenview	4	468		i	3	1
Carlaw	"	" " " " " " " " " " " " " " " " " " "	2	322	:::		2	4
Cashel	,	"					ا	
Dungannon .		**	4	407	3	277	2	-
Faraday Herschel			$\frac{4}{10}$	439 1,306	··i	4	2 5	3 6
Limerick		"	1	172			1	
Мауо	"		7	515		ا.یر	5	3 5 2 3
Monteagle McClure	"	66	14 7	1,342	2	9	11 6	5
Wicklow	"	4 44	11	951 1,003	i	···ii	9	3
Wollaston	**	46 46		_,,,,,]	• • • •
Algona, S	Ranfrage	Adam Prince Wilne	9	110		.	-	9
Brougham	" " " " " " " " " " " " " " " " " " "	Adam Prince, Wilno	2	119 904	``i	30	1	2 3
	•	•	_		_			-

Appendix No. 13.—Continued.

Township.	District or County.	Age	nt.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Brudenell	Renfrew	Adam Prince, V	Wilno	2	198			 	2
Burns	. "		**	8				7	1
Grattan			44	1	204	1	4	1	
Griffith	11	"	41	$\begin{vmatrix} 1\\1 \end{vmatrix}$				1	
Jones	44	••	44	3		l i	33	1	-
Lyell	Nipissing	44	44	ı		1	200		1
Lyndoch	Renfrew	"	**	l î	115				1
Matawatchan.	**	"	44	1	197			1	
Radcliffe	"	**	44	5	617	1	49 1		
Raglan	44			3		1	50	1	
Richards			"	6		1	8	4	2
Sebastopol				5	364	i	60	4	2
Buerwood				9	600	1	60	4	2
Algona, N	Renfrew	Finlay Watt Pe	mbroke						
Alice	"	**	66						1
Buchanan (pt)	**	**	"	1	100			2	1
Fraser	::	i ::	44	$\frac{3}{2}$		1	11	• • • •	1
Head Maria			44	2	306			• • • •	1
McKay (pt)			**		• • • • • • • •	• • •	• • • • • • •	• • • •	• • • •
Petawawa	- 14		44	2	302	···2	1	i	
Rolph	"	44	**	3		ī	21		i
Wilberforce	"	"	"						$\bar{2}$
Wylie (pt)	"	"	11	1	100				2
Colmin	NT:-!	D-1 4 C 11 1	f.44		407				
Calvin	Nipissing	Robert Small, M	aattawa	4	$\begin{array}{c} 407 \\ 427 \end{array}$	• • •	• • • • • • •	1	2
Lauder	- "	44	44	2	292		• • • • • • •	• • • •	1
Mattawan	44	64	44	3	405			1	2
Papineau	**	41	64	7	851	1	38	$\bar{4}$	3
W1		F11 1137 11 0	1. 0. 1.		00				
Korah Parke	Algoma	Edw'd Noble, Sa	ult Ste. Marie	1	80	• • •		1	
Prince	11	"	"	2	268	i	50	···i	6
1111100				ا ا	200	1	30	1	0
Aberdeen	Algoma	Thos. Buchanai	n, Thessalon.	2	237	2	26		3
add.	"	4	44					• • • •	
Galbraith Lefroy	"	"	"	8	1,297	2	145	. 1	2
Plummer	14	44	46	• • • •		1	159	• • • • •	2
" add.	"	44	44	• • • •	•••••				
,									••••
St. Joseph Is'd	Algoma	W. E. Whybourn	e, Marksville	13	1,158	• • •	•••••	12	1
Baldwin (pt.).	Algoma	Neil Mulvaney,	Espanola	7	840	6	245		4
Merritt	"	a	"	12	1,641	2	64	3	6
Blake	Thunder Ray	W. A. Burrows,	Port Arthur	26	4,160	5	800	10	7
Conmee	"	" Julions,	1010 WITHIR	32	4,749	4	17	19	11
Crooks	"	44	"	29	4,472	5	299	12	$\frac{11}{2}$
Dawson Road.	••	"	"	63	7,467	10	426	42	
Dorion	"	44	"	4	639			6	9
Gillies	14	44	"	8	1,274	ا ا		7	4
Gorham		14		47	6,808		1,5941	45	15
Lybster Marks		"		18	2,624	$\frac{1}{2}$	49	$\frac{14}{7}$	3 5
	'		,	91	1,451	ا2	101	. ,	9

Appendix No. 13.—Continued.

Township.	District or County.	Age)	nt.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
McGregor McIntyre O'Connor Oliver Paipoonge,N R S R Pardee Pearson Scoble Strange Ware	Thunder Bay.	W. A. Burrows, " " " " " " " " " "	Port Arthur	37 1 8 6 2 43 22 9 79	5,800 1,288 966 	6 2 2 2 1 2 2 14	63 161½ 5 120 112½ 163	5 2 13 10 11	9 8
Atwood Blue Curran Dewart Dilke Morley Morson McCrosson Nelles Pattullo Pratt Rosebery Shenston Sifton Sifton Sutherland Tovell Worthington	Rainy River	William Camer	on, Stratton "" "" "" "" "" "" "" "" "" "" "" ""	14 14 15 37 15 8 9 11 26 8 18 18	1,842 161 675 162 645 5,692 1,987 1,124 1,116 1,776 	8 1 5 26 9 5 3 7 6 8 1 1 1 1 1 1 1 1 1 1 1 1 1	2 88½ 1,258½ 577 250 95 363 152 648 123½ 98 251 461	1 1 5 29 10 7 3 6	3 1 4 6 7 9
Aylsworth Barwick Burriss Carpenter Crozier Dance Devlin Dobie Fleming Kingsford Lash Mather Miscampbell Potts Richardson Roddick Woodyatt	Rainy River .	Alex. McFayde	n, Emo	1 9 4 7 12 2 9 1 11 6 17 18 5		2 3 1 2 1 4 1 4 3 	61½ 79¾ 59½ 36½ 40 525 39½ 322	7 12 3 8 1 8 5	4 5 2 8 5 4 1 2 1 12
Aubrey Eton Langton Melgund Mutrie. Rugby Sanford Southworth Temple	Kenora	R. H. Pronger, " " " " " " " " " "	Dryden	8 11 5 4 18 10 10 8	618 2,570 1,277 1,363	2	801	7 8 · · · 7 9 · · · 6 5 5	3 5 8 8 7 11 10

Appendix No. 13.—Concluded.

Township.	District or County.	Agent.	No. of persons located.	No of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Van Horne Wabigoon Wainwright Zealand		R. H. Pronger, Dryden	2 26 8 22	3,979 1,269	2 4 3	190 312 60	3 25 6 14	1 6
Melick Pellatt	Kenora	W. L. Spry, Kenora	14 15	,	1 6	53 264	41 13	
Blezard Capreol Hanmer Lumsden		J. A. Lemieux, Blezard "Valley "" "	10 8 6	1,684 1,138	5 4 1	1,042 81	1 5 2 1	3 2
Balfour	66	J. K. MacLennan, Sudbury " " " " " " " " " " " " " " " " " "	3 12 4 14 2 1	1,503 557 2,014 241 161	1 2 1 3 	160 311 152 173	1 2 1 5	5 <u>1</u>
Appelby Casimir Dunnet Hagar Jennings Kirkpatrick	66 66 66	Emile Langlois, Warren	5 4 8 4 4 3	642 1,268 510 565	1 1 2 1	8½ 1½ 2 3	3	6 2 2 3
Grant Macpherson Martland	Sudbury Nipissing	J. A. Philion, Sturgeon Falls.	9 4 7 8 10 3	636 1,117 1,178 1,570	1 1 1 1	33 2 5 3	1 5 	8
Clarendon Denbigh	Addington Frontenac	Charles Both, Denbigh	1 1 4				1 1 2 1	İ
(pt.)	Muskoka Nipissing	Unattached	3 1 1 5 1575	202 101 708	 1 1 3	77 99 73 300 18,017	1 1 3 1020	5 1 4 828

W. C. CAIN, Clerk in Charge.

AUBREY WHITE,
Deputy Minister.

Appendix No. 14.

Statement of Municipal Surveys for which instructions issued during the 12 months ending October 31st, 1913.

No.	Name of Surveyor.	No.	Date	of Instruc- tions.	Description of Survey.
1	A. S. Campbell	687	Feb.	18th, 1913.	To survey the line between concessions 7 and 8 from lots 9 to 13, in the township of Hinchinbrooke, or as much farther on each side as an original post can be found.
2	Wilbert S. Gibson	688	Mar.	19th, 1913	To survey the allowance for road between the 1st and 2nd ranges, Credit Indian Reserve, south of Dundas St., township of Toronto, from the northwest angle of lot No. 8, 1st range, across lots Nos. 9, 10, 11, 12, 13 and 14 in the 1st range, and lots Nos. 6, 9 and 10 in the 2nd range, Credit Indian Reserve, and thence along the road allowance between the 2nd range, Credit Indian Reserve, and the 2nd concession of Toronto township south of Dundas St., being across part of lot 22, lot 23, lot 24 and lot 25 in the 2nd concession south of Dundas Street to the westerly limit of said lot 25, being the easterly limit of the allowance for road between lots Nos. 25 and 26, known as the "Lorne Park Road," and as regards the 2nd range on the northerly side of said road allowance, being across parts of lots No. 10, lots 11 and 12, and part of lot 13 in the 2nd range, Credit Indian Reserve, and to define said allowance for road by permanent stone or iron monuments planted on each side thereof.

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 15.

Statement of Municipal Surveys confirmed during the 12 months ending October 31st, 1913.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.	Date when confirmed, under R.S.O. 1897, Chap. 181, secs. 10-15 inclusive.
1.	J. J. McKay, Tyrrell & McKay	1	July 27th, 1910	To survey certain concessions, road allowances, etc., formerly in the township of Barton, now in the city of Hamilton, as follows:—Barton St. from Sherman Ave. to the allowance for road between lots Nos. 2 and 3 of the township of Barton now in the city of Hamilton. Main St. from Sherman Ave. to Ottawa St. The allowance for road between the 3rd and 4th concessions of Barton now in the city of Hamilton from Ottawa St. westerly to the city limits. Sherman Ave. from the brow of the mountain northerly to the base line. Trolley St. from the brow of the mountain northerly to Burlington Bay. Allowance for road between lots 2 and 3 from the city of Hamilton Water Works pipe line to Barton St., and to plant durable monuments at the front and rear angles of the lots therein, also to plant durable monuments at the front and	Aug. 6, 1913
2.	A. S. Campbell	687	Feb. 18th, 1913.	rear of the following portions of concessions and allowances for road between lots in the city of Hamilton, and at the front and rear angles of the lots therein:—From the eastern limit of Lakeview Ave. to the head of the Strongman Mountain Road. From Bay St. to allowance for road between lots 20 and 21, known as Paradise Road. Paradise Road from Aberdeen Ave. to Marsh known as Coot's Paradise. To survey the line between concessions 7 and 8 from lots 9 to 13 in the township of Hinchinbrooke, or as much farther on each side as an original post can be found.	Oct. 22, 1913

Appendix No. 15.—Continued.

Statement of Municipal Surveys confirmed during the 12 months ending October 31st, 1913.

No,	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.	Date when confirmed, under R.S.O. 1897, Chap. 181, secs. 10- 15 inclusive.
3	J. H. Moore	628	Sept. 14th, 1900	To survey the boundary line between the townships of Montague and Beckwith, in the county of Lanark, and to plant stone or other durable monuments on each side of the road allowance in such positions as shall define the true boundary between said townships.	

GEORGE B. KIRKPATRICK, Director of Surveys. AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys in progress during the 12 months ending October 31st, 1913.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount Paid.
			Survey of Township of Drayton, District of Kenora	5,000 00
			Survey of Township of Stirling, District of Thunder Bay	2,500 00
		Į.	Survey of Township of Lowther, District of Algoma	4,300 0
			Survey of Township of Schofield, District of Algoma	4,000 0
		+	Survey of Timber Berths in the District of Thunder Bay	3,000 0
			Survey of Township outlines, Districts of Sudbury and Algoma	3,000 0
			Algoma	3,500 0
			Timiskaming	3,000 0
		į .	Survey of Township of Orkney, District of	
			Survey of Township of Shetland, District of	3,500 0
		Spoight & Wan	Algoma	2,800 0
			Survey of outlines of townships, District of Kenora	
4	Aug. 14, 1913.	Sutcliffe & Nee- lands	Survey of Township of Malachi, District of	0.000.0
15	Apr. 18, 1913.	A. L. Russell	Kenora Survey of land adjoining and north of Townships of Ware, Gorham and McGregor, District of Thunder Bay	
16	July 17, 1913.	McAusian & Anderson		
17		James Hutcheon .	Inspection of Surveys	500 0
		٠		50,000 0

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 17.

Statement of Crown Lands surveyed, completed and closed during the 12 months ending
October 31st, 1913.

	,		,	,	,		
No.		Date of Name of Surveyor.		Description of Survey.		nt d.	No. of Acres.
1	May	14, 1912	Lang & Ross	Survey of township outlines, Dis- trict of Algoma	\$ 621	c c	
2	May	20, 1912	Speight & Van Nostrand	Survey of township outlines, Dis- trict of Algoma and township of			
3	May	20, 1912	H. J. Beatty	Mulloy		90	
4	May	21, 1912	Andrew Bell	Survey of township of Sargeant, District of Timiskaming			36,851
5	}		1	Survey of township of Shackleton, District of Timiskaming			54,420
6				Survey of township of Stoddart, District of Algoma	١.		
Ī			J. W. Pierce	Survey outlines of townships, District of Algoma	890		-
_	July		D. J. Gillon	Survey of township of Mathieu, District of Rainy River		90	26 859
•			T. J. Patten	Survey of township outlines, District of Sudbury	277	18	
	1		H. O. Dempster	trict of Algoma	1,073	55	
				Survey of part of the township of Nansen, District of Timiskaming Survey of township of Way, District		- 1	
13	June	5, 1912	derson G. P. Angus	of Algoma Survey of part of township of Han-		- 1	
14	June	13, 1912	Cavana & Watson	lan, District of Algoma Survey of township outlines, District of Algoma			34,575
15	June	17, 1912	E. D. Bolton	trict of Algoma	880 234		
16	July	17, 1912	A. S. Code	Survey of township outlines, and township of Studholme, District of Algoma			E1 OEE
17	June	24, 1912	Coltham & Colt- ham	Survey of part of township of Casgrain, District of Algoma	•		51,855 34,609
18	Oct.	10, 1912	C. H. Fullerton	Survey of timber berths in town- ship of Mulligan, District of Tim-	_		94,009
10	Tuno	10 1010	C E Fitton	iskaming	370 1,685		
20	Nov.	19, 1912	E. Seager	Survey of timber berths in District	1,000	40	
	Dec.	4, 1912		of Kenora	4,049	07	
	Jan.	23, 1913					
21	Jan.	17, 1913 22, 1913	Speight & Van	Survey islands in Cache Lake, in	-0-	10	
22	Nov.	25, 1912		Algonquin Park Survey Timber Berth A, District of Nipissing	535 115		
23	June	10, 1912	derson D. Beatty	Survey part of township south of Henvey Indian Reserve, District	110	-0	
24	Nov.	21, 1912	A. Lougheed	of Parry Sound	708		
25	Nov.	29, 1912	E. R. Bingham	Survey parts township of Blake	2,005	UU	
				and Crooks, District of Thunder	2,696	45	

Appendix No. 17.—Continued.

Statement of Crown Lands surveyed, completed and closed during the 12 months ending October 31st, 1913.—Continued.

No.		Date of Instructions.		Name of Surveyor.	Description of Survey.		int	No. of Acres.
26 27 28 29 30 31	Dec. May July Apr.	2, 29, 19, 28,	1912 1912 1912 1913	E. D. Bolton J. F. Whitson J. W. Fitzgerald . David Beatty J. S. Dobie McAuslan & Anderson	Hearst Survey at Hay Bay, township of Fredericksburg Survey township of Fauquier, District of Timiskaming Making report on land adjacent to line of Lake Huron and Northern Ontario Railway Survey of lot 34, concession 16 township of Ferris Maurice Derouard, draughtsman on DeMorest & Stull's survey of islands in Lake of the Woods. Maurice Derouard, draughtsman on DeMorest & Stull's survey of islands in Lake of the Woods. Maurice Derouard, draughtsman on DeMorest & Stull's survey of islands in Lake of the Woods. Geo. Blair, inspecting land north of Dorion township, District of Thunder Bay Rice Lewis & Son, iron posts	260 47 427 1,086 125 10 166 56 150 55 315 6,373 643 55	00 10 60 10 00 00 35 35 00 00 00 00	34,861
d						39,123	51	464,337

GEORGE B. KIRKPATRICK,
Director of Surveys.

AUBREY WHITE,
Deputy Minister of Lands and Forests.

Appendix No. 18.

SURVEY OF BASE AND MERIDIAN LINES, DISTRICT OF ALGOMA AND THUNDER BAY.

TORONTO, December 30th, 1912.

SIR,—We have the honour to submit the following report on the survey of certain township outlines in the Districts of Algoma and Thunder Bay made by us during the past summer under instructions from your Department, dated the 20th of May, 1912, with accompanying projected maps.

Upon receipt of the instructions, we immediately proceeded to make arrangements for supplies. With six men from Toronto and vicinity we left for Cochrane, the terminal of the Timiskaming and Northern Ontario Railway on 4th June, and upon our arrival were joined by ten men from Chapleau and Heron Bay. Three additional men joined the party after the work had been commenced, and this was the maximum force used during the season's operations.

The work was in charge of T. B. Speight, O.L.S., assisted by John van Nostrand, O.L.S., and N. A. Burwash, O.L.S.

From Cochrane we proceeded to Mileage 44, District E, on the National Transcontinental Railway.

The instructions give the point of commencement as the north-east angle of the township of Boyce, but as the survey was made in conjunction with the subdivision of the township of Mulloy, the last-mentioned township being surveyed under instructions from your Department, of even date, it was found necessary to begin the work on the lines adjoining the township of Mulloy in order to avoid the extra moving of supplies and camp outfit.

A beginning was made on the 13th June at the south-west corner of the township of Mulloy and the boundary between the townships of Shuel and Mulloy was run north for a distance of nine miles, crossing the centre line of the right of way of the National Transcontinental Railway, as constructed on the ground, at four miles seventy-one chains and eleven links. This boundary was completed on 18th June and the party then proceeded with the subdivision of the township of Mulloy.

On 8th July one half of the party proceeded to the south-west corner of the township of Mulloy and ran the boundary between the townships of McCoig and Kohler, nine miles south. Upon the completion of this line the two parties joined in the township of Mulloy.

On 16th July the combined parties proceeded to mileage fifty-two of District E., on the National Transcontinental Railway, and on the following day began to run the boundary between the townships of Burrel and Shuel east from the north-east corner of the township of Boyce.

This line was completed on the 26th July and was run a full nine miles. It intersected the centre line of the right of way of the National Transcontinental Railway, as constructed on the ground, at one mile, fifty-one chains and eighty-two links east of the north-east corner of the township of Boyce. It was intersected by the boundary between the townships of Shuel and Mulloy at one chain and eleven links west of its eastern extremity and intersected the last-mentioned boundary at nine miles and seventy-four links.

The east boundary of the township of Burrell was then run north from the end of the last mentioned line, *i.e.*, from a point one chain and eleven links east of the north-west corner of the towship of Mulloy.

One half of the party ran north on this line, the remainder continuing the survey of the township of Mulloy.

The north boundary of the township of Mulloy was run in conjunction with the sub-division of the township. It was run a full nine miles from the south-east corner of the township of Burrell, and was intersected by the east boundary of the township of Mulloy, at eight miles, seventy-six chains and seventy-eight links.

On 26th August a beginning was made at the north-east corner of the township of Boyce, and the boundary between the townships of Bicknell and Burrell was run nine miles north. It intersected the centre line of the right of way of the National Transcontinental Railway at seventy-three chains and ninety-three links north of the north-east corner of the towship of Boyce.

The north boundary of the township of Burrell was then run nine miles east and was intersected by the east boundary of the township of Burrell, one chain and thirty-three links from its eastern extremity, and it intersected the last mentioned boundary at eight miles, seventy-nine chains and eighty-six links.

Returning to the north-west corner of the township of Burrell, the north boundary of the township of Bicknell was run west from this point to the boundary between the districts of Algoma and Thunder Bay, a distance of ten miles, sixty-three chains and thirty-nine links.

The intersection of these lines was four chains and one link south of Mile Post CIII., planted by A. Niven, O.L.S., in 1907.

From the above intersection the north boundary of the township of Henderson, in the District of Thunder Bay, was run nine miles west.

From a point on this line eight miles, seventy-eight chains and twelve links west of the boundary between the Districts of Algoma and Thunder Bay, that distance making allowance for the convergence of meridians, the west boundary of the township of Henderson was run south to a base line run by T. B. Speight, O.L.S., in 1908.

It was intersected by this base line at nine miles one chain and fifty-two links, and intersected the base line at nine miles exactly. It was also intersected by the centre line of the right of way of the National Transcontinental Railway at three miles, twenty-eight chains and thirty-nine links, south of the north-west corner of the township of Henderson.

All meridians were run due north (or south) astronomically, and the base lines were run due west (or east) on nine mile chords of parallels of latitude. Wooden posts of the most durable material within a reasonable distance of the line, were planted at intervals of one and a half miles, and, in addition, iron posts, one and seven-eighths inches in diameter, were planted alongside the wooden posts, at all intersections of township boundaries, except at the south-east corner of the township of Burrell, and on productions of lines beyond intersections.

On each wooden and iron post the number of the mile it represented was carefully marked on the side nearest the initial point of the line, also on the wooden and iron posts situated at township corners, the name of the township or townships, was marked.

In all cases where wooden and iron posts are planted side by side, the iron post indicates the intended corner.

All lines were well opened out and properly blazed.

Frequent astronomic observations, records of a number of which are appended, were taken for the purpose of verifying the course of the lines run. The magnetic variation was frequently noted, the average declination being 4 degrees west.

The country embraced by this survey has a total depth of twenty-seven miles, north and south, and a total breadth of thirty-seven and three-quarters miles, east and west.

Soil.

Except for a small area of gravel on the north boundary of the township of Mulloy, the soil is clay, containing a small percentage of gravel in most places, and in a few small areas boulders occur. Gravel and sand deposits have been discovered and used in the construction of the National Transcontinental Railway, sidings having been put in at the townships of Shuel and Bicknell. Generally speaking the country will be excellent agricultural land when cleared and drained.

TIMBER.

The greater part of the timber on the west boundary of the townships of McCoig and Mulloy, the north boundary of the township of Mulloy and the easterly six miles of the north boundary of the township of Burrell, is burned, the timber being dead and in a great many places still standing, the second growth not having advanced very far.

On the remainder of the lines the timber is the average spruce, poplar and tamarac of the clay belt, with occasional small cedars and a few white birch and balsam.

On the westerly half of the north boundary of the township of Henderson, and on the south half of the west boundary of that township, the timber is second growth about thirty years old and is of very little value.

In the river valleys occasional small areas of spruce of fair size and quality were met with, and many ties for use on the railway have been taken out.

As mentioned above, canoeable streams occur about every ten to fifteen miles, east and west, running to the north-east. They are shallow and swift with gravel bottoms. With the exception of two cases on the Bad River, no falls were seen, although there are small rapids and riffles about every quarter of a mile. Lakes were conspicuous by their rarity.

MINERALS.

No indications of economic mineral were noticed and the only outcroppings of rock seen were pegmatite and a slightly schistose green rock which occur on the west boundary of the township of Mulloy, near the IM and VIM posts, also certain granite outcroppings, described in detail in our report upon that township.

GAME.

There are a few moose in this district. On most of the small streams fresh beaver cuttings were seen. In the rivers and small streams partridge, prairie chicken and rabbits are fairly numerous. The prairie chicken were found chiefly in the open muskegs and burnt low lying areas. Brook trout and pickerel were fairly abundant and some good pike were caught in the Pegatchewan River.

GENERAL DESCRIPTION.

Generally speaking the surface is level and in places undulating. The main streams which drain the area are the Pegatchewan, Bad, Trout, Dog and Flint Rivers.

The river valleys are narrow and range from ten to fifty feet below the general level of the surrounding country. Much of the land appears wet, but except on the boundary between the townships of Bicknell and Burrell, where from Mileage 5 to 8, a large muskeg occurs, we found nowhere more than eighteen inches of moss and peat, and on the higher ground not more than three inches. In our estimation sixty-five to seventy per cent. of the land embraced by the survey may be classed as good farm land, and when access by means of the railway is completed settlement will begin. The whole of this district lies within the clay belt.

Canocable rivers having a few small tributaries occur about every ten to fifteen miles east and west, and flow in a north-easterly direction. Few lakes were seen.

The southern and eastern part of the tract surveyed was burned about ten to fifteen years ago, and nearly all the timber destroyed. On the remainder of the tract the timber is the average timber found on the clay belt.

Accompanying this report are a plan and field notes of the entire survey, also accounts in triplicate.

We have the honour to be, Sir,

Your obedient servants,

(Sgd.) Speight & van Nostrand,

Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests & Mines, Toronto, Ontario.

Appendix No. 19.

SURVEY OF TOWNSHIP OUTLINES, DISTRICT OF ALGOMA.

ORILLIA, December 12th, 1912.

SIR,—With the object of carrying out your instructions for the survey of certain township outlines in the District of Algoma, bearing date the 13th of June, 1912, our party left Missinaibi with the necessary equipment for the work on the 25th of July following. The route followed was up the east arm of Dog Lake; thence across a short portage into Crooked Lake, where another short portage leads into Missinaibi Lake; and thence to the Missinaibi River, down which we travelled to a point where this last stream crosses the meridian run by O.L.S. Speight in 1910, between XVIM. and XVII. M. posts on that boundary. Such supplies as were required for that purpose were then taken by canoe up

the small creek entering the main river near this point, and which we found to be navigable with some difficulty, to near the crossing of our first base line commencing at the post at XV. M. on above meridian. The survey of the first base line was commenced from the above post. The main part of the supplies were taken on down the river to the portage leading from the Missinaibi to the Fire River at a point about three-quarters of a mile above the crossing of our second base line run from XXIV. M. Where this portage leaves the river the country has been burned over for some distance back and the trail was blocked with heavy windfall. We found it necessary to cut this portage out in order to transport canoes and supplies across to the Fire River. This portage is about two and a quarter miles in length, and with the exception of the first part, where there is a steep rise for fifteen chains or so, is comparatively level. The latter river affords a good canoe route with few obstructions as far as followed, and also furnishes abundant exercise in making headway against its stiff current. At about a mile west of our first meridian the Fire River is joined by a fair-sized creek known as Pajogwin Creek, which flows from a lake of the same name. The latter creek was used for transport for a distance of about one and a half miles north of our second base line where a portage two miles long leads to the southerly end of the above lake. This lake is crossed near its northerly end by the Canadian Northern Railway, and the creek entering it from the west is followed closely by that line. From this lake westerly to Lake Minnapooka it is mostly a case of portage, as the creek is shallow and rocky. From the westerly arm of the narrow recurved lake known as Minnapooka and at its northerly extremity a portage route leads northerly to a small lake known as Bommerang Lake, and thence westerly through a series of small lakes or ponds into Lake Imnokguameguea, a long narrow lake lying nearly north and south and debouching north through a small river of the same name. Travelling south on this last mentioned lake, which is crossed by our third base line near VI. M. on the south boundary of Walls, a portage route leads across to the Oba River and thence into Oba Lake and Loch Alsh, and from the latter there is a portage into a creek flowing into the vest arm of Dog Lake. This route was followed on our return trip after completing the survey bringing us back to Missinaibi from the west.

Our first base line was commenced from the point marked by iron and spruce posts at XVM. on the meridian run by O.L.S. Speight in 1910, and run due west astronomically for a distance of nine miles. From the latter point our first meridian was turned due north and run to the intersection with our second base line and thence continued for nine miles north of the latter base and our third base line turned due west and run through to the meridian run by O.L.S. Patten in the current season. Our second base line was run due west from the post planted by O.L.S. Speight in 1910 and marked 47 chains on the east bank of the Missinaibi River, said post being planted on a line run due west from XXIVM. on the meridian by O.L.S. Speight in 1910, and continued west a distance of nine miles from the intersection of our first meridian and from the last mentioned point our second meridian was turned due north. Our fourth base line was turned due west from a point on our second meridian distant eighteen miles north of our second base line and run to intersect the meridian run by O.L.S. Speight in 1910 continued south by O.L.S. Patten during the current season and forming the westerly boundary of the township of Walls. On meridian and base lines so run, wooden posts six inches square were planted at intervals of one and one-half miles dating from the initial points at the intersections of base and

meridian to the south or east and were marked with the mileage from such initial points. At the intersection of base and meridian lines forming the township corners, iron posts one and one-quarter inches in diameter were planted beside the wooden posts and marked with the township names on the side facing diagonally into the township or townships in question. When the point where such post should be planted fell in a lake or other inaccessible place, the post was planted at the nearest available point on the line and marked with its correct chainage from the initial point. With the exception of the few instances where these were not available, bearing trees were marked to witness the posts so planted and their relative positions recorded in the field notes.

The country traversed by the survey occupies the dim borderland between the clay belt proper and the rock section to the south, and in its general features well reflects its composite character. While there are few hills that attain a height of more than twenty-five feet or thirty feet and these seldom rise with any great abruptness, the country generally presents a decidedly rolling surface, drift covered throughout the greater part of its area and with occasional rock outcrops and rocky sections. The Missinaibi River flows north through the easterly part of the township of Hayward, crossing and recrossing the easterly boundary, and nowhere in its course greatly over a mile therefrom. This stream, forming one of the main branches of the Moose River is too well known to need an extended description and the abundant water powers along its course will doubtless make it still more widely known in the future. Aside from the Missinaibi the most important stream met with is its tributary the Fire River, which is crossed by our second base line between two and one-half and two and three-quarter miles west of the former river and flows for some distance nearly parallel therewith. last stream is from a chain to a chain and a half wide with strong current and affords a good waterway for canoes. At the place where the portage from the Missinaibi River comes out there is a fall of about six feet in this river and about six chains further down stream another fall of great beauty. The latter is about twenty-five feet in height, dropping through a narrow rock gorge into a circular basin of about seven chains in diameter, from which the stream emerges through a narrow rock opening of some ten feet in width. Forming the rim of this basin the rock rises precipitately to a height of forty feet or more, the whole forming a scene that imprints itself strongly on the memory and is well worth travelling some distance to see. From the commercial standpoint this fall would permit of power development at a minimum of cost.

The country is covered with the characteristic forest growth of this latitude and surface configuration. The timber values as a whole are not relatively high; but a great deal of material in the form of spruce, poplar, balsam and jack pine could be harvested from the area which has not been visited by fire. The greater proportion of this timber would probably be found more valuable for pulpwood than for milling purposes. In the south-westerly part of Hayward, extending westerly from the Greenhill River across the westerly boundary of the township and northerly about three miles the timber is heavy and composed of jack pine, spruce, birch, and balsam, carrying a thick undergrowth of moosewood and hazel. The same character, but with the trees much more scattered, applies to the south-westerly portion of Legge. A narrow belt of jack pine in length and size to cut four tie lengths is crossed by the meridian forming the west boundary of Legge within easy hauling distance of the rallway line. Cedar of commercial size is scarce. One clump running from twelve to twenty-four inches in diameter and

suitable for poles up to thirty-five feet in length was passed through on the easterly boundary of Walls near IIM., and another similar character near the north-east angle of that township. Fire has wrought much mischief through the section, its ravages being most noticeable along the second base line from the Missinaibi River to Pajogwin Creek. The whole westerly part of Walls extending from Imnokguameguea Lake to the north-east angle of the township is composed of an old brule growing up with small jack pine, poplar, birch and balsam, save where the original swamps have resisted the advance of the fire. Great credit is due to the manner in which the clearing and burning of the right of way of the Canadian Northern Railway, which takes a diagonal course from south-east to north-west through the townships embraced in the survey, has been performed; the green avenues of trees, except in places which had been previously burnt over, forming a most cheerful contrast to the conditions encountered along the older lines.

From an agricultural standpoint this section is inferior and until such time as the wide area of good land included in the clay belt proper lying to the north is fully occupied it will probably be found more valuable as a constituent part of a forest reserve than for settlement purposes. The soil is mostly composed of a clay sand mixture, usually with the clay largely predominating. From this it varies from clay loam to sandy loam, with from one to six inches of black mould as a surface covering. It is generally stony and in many places boulder strewn. The parts offering the best inducements for agricultural development appear to be along the northerly part of Legge and the brule section in the westerly part of Walls. Along the Canadian Northern right of way, where it has been found necessary to make cuts in the muskeg or swamp areas, the muck surface is found to be underlaid by boulders, and this is probably true throughout the section.

To the hunter or angler this part offers abundance of sport in quest of the lordly moose, who finds it a congenial habitat, or in angling for the wary trout. The speckled trout is abundant in Fire River and we believe in some other streams of the district as well, and may be taken to a weight of at least three pounds. When the railway now under construction is completed it will offer easy access to a sporting country of high rank.

We have the honor to be, Sir,

Your obedient servants,

(Signed) CAVANA AND WATSON.

Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 20.

SURVEY OF TOWNSHIP OUTLINES, DISTRICT OF ALGOMA.

SAULT STE. MARIE, ONT., November 4th, 1912.

SIR,—We have the honor to submit the following report on the survey of outlines of certain new townships north of Hobon Junction on the Canadian Pacific Railway in the District of Algoma, made by us under instructions from

your Department dated May 14th, 1912.

We arrived at Loch Alsh on the morning of May 18th, with men and supplies ready to commence and completed our work on July 10th. On the morning of May 19th we moved up Wabatongashene Lake some eight or nine miles to the place of beginning and commenced our survey late in the afternoon of the same day.

Commencing at the 144th mile post on O.L.S. Niven's base line on the shore of Wabatongashene Lake we ran due west astronomically nine miles, marking our posts in Arabic figures on the east side, "145" up to "153" planting one post at the end of each mile. At this point we connected our line with a post planted by O.L.S. Stewart as the approximate north-east angle of Township 51 by a line.

We then ran north astronomically from this 153rd mile post 24 miles and planted posts at the end of each mile until the 6th mile and north of that point at the end of each mile and a half. At the end of the 147th mile on the base line we ran due north astronomically six miles more or less, planting posts at the end of each mile and marking them on the south side in Roman numerals with the number of miles the said posts are north of the production of Niven's base line. From the end of the 6th mile on our 1st meridian we ran a line due east astronomically nine miles, planting posts at the end of each mile and a half and numbering them on the west side. From a point on our 1st meridian 15 miles north of the 153rd mile post on the production of Niven's base line, we ran our 3rd base line east astronomically to Oba Lake, and from the end of the 24th mile post on our 1st meridian we ran our 4th base line east-astronomically to Oba River. From the end of the 9th mile on our 2nd base line we then ran our 2nd meridian due north astronomically 18 miles, planting posts at the end of each mile and a half. We then produced our 3rd and 4th base lines east astronomically to a distance of nine miles net east of our 2nd meridian.

At the angles of each of the townships and at the eastern ends of our 3rd and 4th base lines along side the wooden post we have planted an iron post, one and one half inches in diameter and three feet long, a tube, forged at the top, pointed at the bottom and painted red and in each case marked with the names of the adjacent townships with a cold chisel. At all crossings of the Algoma Central Railway we have tied our lines with the mileage on the railway as shown us by the Company's Engineers.

PHYSICAL FEATURES.

The entire area which we covered with those lines south of the north end of Oba Lake was very rugged and for the most part covered very thickly with small birch and poplar. Abrupt granite hills thickly covered with large boulders and gravel, run in all directions, divided by very deep valleys. To the north of Oba Lake the country slopes to comparatively level clay land and easily drained muskegs

with rocky outcroppings here and there. In the more westerly portion of our work we encountered a great number of small lakes, but toward the east there were very few; so much so that we were unable to use our canoes at all for purposes of transportation. Wabatongashene and Oba Lakes have heretofore been surveyed by your Department, so mention of them would be superfluous. There is a chain of lakes starting near Hobon and connecting with the north end of Wabatongashene Lake. A river emptying into the north-east bay of this lake drains a chain of lakes lying to the north-east. Spruce Creek which runs into Oba Lake at the extreme north end from the east drains several large lakes lying some seven miles to the east of Oba Lake.

Soil.

In the valley of the Oba River only did we encounter arable land. In this section there is strong clay loam of very considerable depth. It is adaptable in every way to farming; more particularly as it requires very little clearing, as it has been swept a second time by fires within the past six years.

TIMBER.

The timber is almost a negligible quantity. Nine-tenths of the country has been burnt over some years ago, and only along the shores of some of the lakes and in the swamps are stands of commercial timber to be found. This burnt area has grown up very thickly with white birch and poplar which to-day average about twenty feet in height. Such jack pine and cedar as there was has been largely cut within the past year for ties, trestles, etc., for the construction of the Algoma Central Railway north of Hobon. Around the shores of Wabatongashene Lake there was a considerable quantity of Jack pine averaging twelve inches in diameter, also around the lakes which the Algoma Central Railway parallels for the first twelve miles north of Hobon. In short, timber of any commercial value is so scattered and in such small quantities as to be hardly worthy of mention.

WATERS.

The main water way is of course the Oba River, Oba Lake, and Wabatongashene Lake. These two lakes are connected at present by a monorail tramway owned by the Superior Construction Company, but previously a small stream was used on which it was necessary to make three portages. The Oba River as far north as we went is easily navigable for canoes. From the north end of Wabatongashene Lake one can reach Hobon through a series of lakes and small streams. This, however, is very difficult route at low water. By means of Spruce Creek which runs into the north end of Oba Lake it is possible to cross over to the waters of Missinabi River. On our west meridian we encountered the edge of Magpie Lake, which is the gateway to another large system of water ways. On this meridian we crossed numerous small lakes, but none of them are worthy of mention in this connection.

FISH AND GAME.

The rivers and lakes as far as we were able to ascertain contain pickerel, pike and white fish, and in some places on the Oba River we understand there are

quantities of speckled trout. We saw signs of both moose and red deer, but we do not consider that they are very plentiful in the country. Everywhere we found partridge and rabbits in great numbers.

Accompanying this report we submit plans and field notes and account in

triplicate.

We have the honor to be, Sir,

Your obedient servants,

(Signed) LANG AND Ross,

Ontario Land Surveyors.

The Honorable the Minister of Lands, Forests and Mines. Toronto, Ont.

N.B.—The average magnetic variation for the ground covered by us was 4 deg. west.

Appendix No. 21.

TOWNSHIP OUTLINES, DISTRICT OF ALGOMA.

Pembroke, December 28th, 1912.

SIR,—I have the honor to submit the following report on the survey of certain township outlines in that portion of the District of Algoma lying between the Trout and Kapuskasing Rivers on the east and the Missinaibi River on the west, performed under instructions dated May 20th, 1912.

In pursuance of instructions I commenced my survey at the nine mile post on O.L.S. Speight's meridian line run in 1910 from the 108th mile post of O.L.S. A. Niven's base line run west from the 120th mile post of the boundary between the Districts of Nipissing and Sudbury in 1899.

From this point I ran east, astronomically, a distance of nine miles and thence south, astronomically to intersection with O.L.S. Niven's base line near the 99th

mile post and also north, astronomically, a distance of 9 miles.

Continuing my first base line east, astronomically, 9 miles and again running south, astronomically, to intersection with O.L.S. Niven's base line near the 90th miles post and also north, astronomically, a distance of 9 miles.

Again continuing my first base line to intersection with O.L.S. Pierce's meridian line, run north, astronomically, from the 81st mile post of O.L.S. Niven's base

line near the ninth mile post of said meridian.

From here I went down the Kapuskasing River and produced O.L.S. Speight's base line run in 1909 from the 2nd mile post of the chord begun about 60 chains east of the Kapuskasing River, to intersection with my meridian run north astronomically from near the 90th mile of O.L.S. Niven's base line, and again with O.L.S. Speight's meridian run south astronomically from his base line 27 miles north from O.L.S. Niven's base line.

Continuing my base line west, astronomically, I intersected my meridian run as aforesaid north astronomically from near the 99th mile of O.L.S. Niven's base line.

And again continuing west, astronomically, I intersected O.L.S. Speight's meridian run in 1910, from the 108th mile post of O.L.S. Niven's base line, near the 18th mile post thereof.

The above mentioned lines were well cut out and the adjacent trees blazed on three sides in the usual manner, and hewn posts were planted as shown in the notes, care being taken to plant these posts firmly; where possible a mound of stones was erected about the post, and when the point came in a lake or river the post was planted at the nearest suitable point and the proper chainage in miles, chains and links carved thereon.

Iron posts were planted as shown in the notes but were not planted at all points as instructed on account of a consignment going astray when forwarded by freighters from Chapleau, which I regret very much.

At frequent intervals throughout the survey observations on Polaris were taken for obtaining azimuth and the magnetic declination which varied between 5 degrees and 8 degrees west of the meridian was noted and entered in the field notes.

Throughout the survey the chainbearers were duly impressed with the importance of their duties and of the need of great care to obtain accuracy in their measurements.

NATURAL FEATURES.

The district through which my lines run seems for the most part to be rolling land with a predominance of swampy land, especially along the route of the Canadian Northern Railway, which traverses this district diagonally. North of this branch of the Canadian Northern Railway (under construction) and between the Kapuskasing River and the Missinaibi River is a belt of good agricultural land for the most part being a greyish clay loam with a light grey clay subsoil. To the south there are small portions of good land but with a good deal of stone and round boulders beneath the loam. The country around Gull Lake and from thence easterly to the Trout River is stony land interspersed with swamp and marshes. Along the Missibaibi River there is good clay land, but lighter than in the interior townships to the north and east.

Speaking generally, the three townships north of my first base line are suitable for agricultural purposes and of the balance about fifty per cent. is good land.

No evidence of economic minerals were noted.

TIMBER.

The northeastern portion of the district is well wooded with spruce, balsam and cedar of a size suitable for building operations, ties and pulpwood but considerable tamarac was seen in the western and southern portions, especially in the stony country.

Along the second base line and southwest to the Missinaibi River and the Canadian Northern Railway considerable good poplar, Balm of Gilead and some pine was noted. While there is abundance of timber for use of settlers and in construction, yet there is not that amount which would warrant extensive lumbering operations.

WATER POWER.

Several good rapids and chutes were noted which would be adaptable for use in development of power, the more important being on the Kapuskasing River about six miles from Kapuskasing Lake, and again just north from Speight's base line. Some of the rapids of the Missinaibi would furnish problems in water power development.

GAME.

Moose and caribou appear to abound in the swamp country and we saw signs of red deer in the hilly country to the south.

Muskrat, otter, beaver, marten, fisher and mink were seen occasionally; while rabbit, partridge and duck did not seem so plentiful as of late years. The rivers and lakes generally are well stocked with pike, pickerel and perch. There is splendid speckled trout fishing on Beaver River, fish up to one and one-half pounds being taken.

Accompanying this report are a plan mounted on linen, a timber plan, field notes, chainbearers' oaths and account in triplicate.

I have the honour to be,

Sir,

Your obedient servant,
(Signed) Herbert J. Beatty,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 22.

SURVEY OF TOWNSHIP OUTLINES DISTRICT OF SUDBURY.

Peterborough, Ont., January 30th, 1913.

Sir,—I have the honour to submit the following report on the survey of Township outlines—along the Canadian Northern Railway, in the District of Sudbury performed by me, under instructions from your Department, dated July 9th, 1912.

As instructed, I commenced the survey at a point ten chains east of the south-west angle of the Township of Garvey—the south boundary line of which, I produced due west astronomically twelve miles and ten chains from the post planted on the east shore of Donneganna Lake—said post being ten chains east of the south-west angle of the Township of Garvey, which falls in Donneganna Lake. From the end of the sixth mile on this base line I ran a meridian due north astronomically eighteen miles, and from the end of the sixth, twelve and eighteen

mile on this meridian I ran base lines due east and west astronomically six miles to intersect a meridian on the east, surveyed by me in 1911, and to connect with a meridian on the west which I afterwards ran due north astronomically eighteen miles from the end of the twelfth mile on my first base line. I also produced the north boundary of the Township of St. Louis west astronomically a distance of forty-two chains and fifty-six links to intersect the west boundary of the Township of Jack, which meridian had just been surveyed by Ontario Land Surveyor, Walter Smith, my base line produced intersecting Mr. Smith's meridian one chain and seventy links north of the point at which he had established the south-west angle of the Township of Jack. All lines in connection with the above survey were well opened out-blazed-chained and posted. At each of the angles of the various townships, iron posts-one and one-half inches in diameter-three feet long and painted red, were planted; on these posts the names facing the respective townships, were cut with a cold chisel. On the meridian lines durable wooden posts six inches square were planted at the end of each mile with the number of miles said posts are distant, north of the south-east or south-west angle of the adjacent townships, cut on the south side with a scribing iron, durable posts four inches square and similarly marked with the half-mile points were also planted. On all lines running east and west durable posts six inches square were planted at the end of each mile with the number of miles said posts are distant west of the southeast or north-east angle of the adjacent townships, cut on the east side with a scribing iron—durable posts four inches square similarly marked with the halfmile posts were also planted. Going west along the south boundaries of the Townships of Westbrook and Vrooman the line passes over an undulating sandy country timbered with Banksian pine, spruce, white birch, poplar, balsam and cedar, with alder and willow underbrush and considerable windfall; spruce swamps of considerable extent are also met with all along this line. No white or red pine suitable for lumbering is seen, but much of the Banksian pine and spruce is of a considerable size, and, besides being valuable as pulpwood, would, I am sure, make a good quality of lumber. Going north along the west boundaries of the Townships of Westbrook, Champagne and Groves the character of the country is much the same as far north as Minniesinaqua Lake, where it becomes rocky and broken. Along the sixth mile of the west boundary of the Township of Westbrook and first mile of the west boundary of the Township of Champagne considerable good red and white pine up to twenty-four inches in diameter is seen. Along the west boundary of the Township of Groves-east of Minniesinaqua Lake a considerable area of spruce swamp is passed over, also a small patch which has just been destroyed by fire-no doubt burnt in connection with fire used for clearing the right-of-way of the Canadian Northern Railway which lies a short distance east at this point.

Going north along the west boundaries of the Townships of Vrooman, Benneweiss and St. Louis for the first two miles, the line passes over an undulating sandy country covered almost exclusively with scrubby Banksian pine, and from this point to the end of the fifth mile on the west boundary of the Township of Vrooman, the line passes over a gently undulating sandy plain almost destitute of living timber. Along the sixth mile of the west boundary of the Township of Vrooman and the first and second miles of the west boundary of the Township of Benneweiss, the character of the land is much the same but the timber has been destroyed by fire some years ago and is now replaced by small Banksian pine, poplar and white birch, known as Brulé country.

Along the third, fourth, fifth and sixth miles of the west boundary of the Township of Benneweiss, and along the whole of the west boundary of the Township of St. Louis, the country is rough and rocky, the timber consisting chiefly of Banksian pine, spruce and birch up to fifteen inches in diameter with alder and willow underbrush and heavy windfalls. Along the fourth, fifth and sixth miles of the west boundary of the Township of St. Louis some scattered white pine up to eighteen inches in diameter and of fair quality is seen.

Along the north boundaries of the Townships of Westbrook and Vrooman the land is undulating and sandy, and, with the exception of several spruce swamps which the line passes through, the timber is of the same general character as that already noted.

Along the north boundaries of the Townships of Champagne and Benneweiss the country is rolling and rock, timbered chiefly with Banksian pine, spruce, birch, poplar and balsam; a few small swamps are also crossed on this line. Along the north boundaries of the Townships of Groves and St. Louis the country is rough and rocky the timber being much ihe same as that already described. On the Canadian Northern Railway steel was laid to a point about one mile north of the north boundary of the Township of Champagne at the time of survey.

The geological formation of this locality is the Huronian, no mineral of value being seen. I think I am also quite safe in saying that in the six townships outlined by me this season, there is absolutely no land fit for agriculture. I found the average magnetic variation about seven degrees west. Frequent observations for Azimuth were taken, the lines in all cases checking very closely.

Moose are very numerous in this locality, and the beaver is still active.

Accompanying this report are plans, field notes and accounts, all of which I trust will be found complete and satisfactory.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 23.

SURVEY OF THE TOWNSHIP OF HENVEY, DISTRICT OF PARRY SOUND.

PARRY SOUND, June 6th, 1912.

SIR,—I have the honour to report that under your instructions of May 20th to make a resurvey of the south west part of the Township of Mowat, I left Parry Sound on May 29th and arrived at Byng Inlet Mills the same evening. On the following day I hired my men and moved up the Still River about two miles, where I camped close to the north boundary of the Township of Wallbridge and the following morning observed Polaris for meridian and re-ran the north boundary of Wallbridge from the post between lots 42 and 43 eastward to side road 35-36 finding all the posts or portions of them, also the south-west angle of the Township of Mowat, where I found part of the original post in a mound of stones. On the following day (May 1st) I ran a trial northward from said south-west angle of Mowat one hundred chains without finding indications of the original boundary till within a few chains of Con. line II and III, and found that my line was one chain and ninety-five links east of the original monument marking said con. line. I found the bottom part of the post in the centre of the west boundary and centre of said con. line in pile of stones, the post for Con. II and west side of lot 35 was lying beside a mound of stones.

On May 3rd I ran the true boundary between the south-west angle of Mowat and Con. II and III on west side of said township.

There are no settlers in the Township of Mowat along the Still River. They are all west of this township in the unsurveyed land, nor is there any land along the Still River in the township worth settling on.

The object of the survey being to locate the settlers along Still River in the Township of Mowat, I did not consider it necessary to make further survey.

I herewith enclose the names of the several settlers along the Still River in the unsurveyed land between the north boundary of the Township of Wallbridge and the west boundary of the Township of Mowat, with the estimated acres of each man's clearing.

I have the honour to be,

Sir.

Your obedient servant,

(Sgd.) DAVID BEATTY,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont. Appendix No. 23a.

SURVEY OF A PIECE OF LAND WEST OF MOWAT AND SOUTH OF THE HENVEY
INLET INDIAN RESERVE.

Township of Henvey,

PARRY SOUND, July 26th, 1912.

SIR,—I have the honour to report that under your instructions I have located the several settlers on Still River and vicinity in the unsurveyed land west of the township of Mowat and north of the township of Wallbridge. I interviewed every settler who claimed a location on Still River and had improvements made, and adjusted their boundaries agreeably between them with the exception of W. Gavin (on lot 8 as shown on plan) sometimes called Bedor and commonly known as Wild Cat, who claims a part of lot 3 on the south side of Still River in what I have called Con. B, as well as a part of lot 7 extending along what is known as Little Still River, but from all the information I could get, I decided that what I have blocked out as lot 8 is all that he is entitled to and possibly a little more.

I made a careful traverse of Still River and located the posts which I planted between the several lots in both Cons. A and B therefrom as is shewn on my plan and field notes.

I ran concession lines II and III west from the west boundary of Mowat to S. R. 10/11 and said S. R. south to the Wallbridge boundary. I then ran S. R. 5/6 northward to the Indian Reserve through Cons. III, IV, V, VI and VII and ran concession lines III, and IV and V and concession line VI and VII each across the first ten lots west of Mowat. I did not run S. R. 10/11 through concessions III, IV, V and VI because entirely unfit for settlement, the country being rocky ridges timbered with scrub jack pine. The country along the Canadian Pacific Railway up to the Indian Reserve is good land for two or three lots on each side.

I have the honour to be,

Sir,

Your obedient servant,

(Sgd.) DAVID BEATTY,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines.

Appendix No. 24.

SURVEY OF THE TOWNSHIP OF MULLOY, DISTRICT OF ALGOMA.

TORONTO, December 30th, 1912.

SIR,—We have the honour to submit the following report on the survey of the Township of Mulloy, in the District of Algoma, made under instructions from your Department, dated the 20th day of May, 1912.

The township is crossed by the line of the National Transcontinental Railway which enters it on the east boundary at a point seven chains and ninety-four links north from the south-east corner of the township, at mileage 33, plus fifteen chains and twenty links in District E of that railway, and leaves it on the west boundary at thirty chains and sixty-one links north of the south-west corner of Lot 28, Concession VII, at mileage 43, plus thirty-one chains and ninety-three links of the raid railway.

The township is bounded on the south by the unsurveyed township of McCoig; on the west by the unsurveyed township of Shuel; on the east by the unsurveyed Township of Fintry, and on the north by the unsurveyed lands of the Crown.

On the 4th of June, we left Toronto, via the Grand Trunk Railway, and Timiskaming and Northern Ontario Railway for Cochrane, and from there proceeded by construction trains on the National Transcontinental Railway, to the township.

Work was commenced on the 18th of June.

All lines were run with a transit and frequent astronomic observations, records of a number of which are appended, were taken to verify the courses of the lines run. The lines were well opened out and blazed.

Wooden posts of the most durable wood obtainable were planted at the points required by the instructions.

The iron posts furnished by your Department, were planted as given below; at the intersection of the centre lines of allowances for road at the north east corner of the township of Mulloy, a post one and seven-eighths inches in diameter, marked "Mulloy" on the south-west face, "Fintry" on the south-east face, and "R" on the north, south, east and west faces. Iron posts, one and one-quarter inches in diameter, were planted at the following points; at the intersection of the centre of road allowance along the east boundary, with the centre of road allowance between Concessions VI and VII; at the intersection of the centre of road allowance along the south boundary with the centre of road allowance along the south boundary with the centre of road allowance between Lots 12 and 13; at the intersection of the centre of road allowance between Lots 12 and 13; at the intersection of the centre of road allowance between Lots 12 and 13; at the intersection of the centre of road allowance between Lots 12 and 13; at the intersection of the centre of road allowance between Lots 12 and 13; at the intersection of the centre of road allowance between Lots 12 and 13.

A traverse was made of the centre line of the right of way of the National Transcontinental Railway as constructed on the ground, and where it was used as the fronts of lots, wooden posts were planted on the edge of the right of way, and on the inner edge of the road allowances, which were laid out one chain wide along each side of the right of way.

The general level of the Bad River from its entrance of the township in Lot 28, Concession V, on the west boundary, to the lower "Fall," in Lot 15, Concession X, is forty to fifty feet below the surrounding country, and from the last mentioned point to where it crosses the north boundary in Lot 11, Concession XII, it is about thirty to thirty-five feet below the general level.

A traverse was made of the Bad River.

A traverse also was made of a small lake in Lot 14, Concession VII.

Soil.

On most of the township the clay soil is intermingled with a small proportion of gravel and is of good quality, with from twelve to eighteen inches of moss and peat in the low places, and two to four inches on the higher ground.

On Lot 13, Concession XI, the beach along Bad River is gravelly and this

extends into Concession XII.

On the west boundary of Lot 28, Concession 1, an outcropping of pegmatite occurs, and on the adjoining land there are a number of boulders.

On the west boundary of Lot 28, Concession XI, an out-cropping of slightly schistose green rock occurs and extends about ten chains east.

On the south boundary of Lot 18, Concession V, an out-cropping of massive grey granite occurs.

On Lot 28, Concession V, an out-cropping of rock occurs in the rapids on Bad River.

At the first fall, in Lot 19, Concession VIII, and at the second "Fall" in Lot 15, Concession X, out-croppings of compact rock occur of Huronian formation.

On the south boundary of Lot 14, Concession IX, an out-cropping of granite occurs.

TIMBER.

As will be seen from the accompanying timber plan, most of the township has been burnt over and the second growth in this area is still very small.

On the unburnt area, in Concession VII and VIII, lots 19 to 29, there is a large proportion of spruce and poplar ranging from six to twenty inches in diameter with a few tamarac, cedar, birch, balsam and Banksian pine. A good deal of tie and trestle timber has been cut from this area for use on the National Transcontinental Railway.

The unburnt timber area in Concessions V to XII, lots 1 to 8, on the east side of the township is similar to the above area and has not been cut over.

MINERALS.

No indications of economic mineral were seen.

GAME.

Tracks of a few moose were seen. Fresh beaver cuttings were noticed in a number of places on the small streams. In the Bad and Trout Rivers speckled trout are fairly plentiful, and below the second falls on the Bad River, pickerel are quite abundant.

WATER POWER.

Two "falls occur on Bad River, which averages from two chains to three chains in width, and is a very shallow stream full of boulders and almost continuous small rapids. It is impassible with an empty canoe, at low water. The upper fall is situate on Lot 15, Concession VIII, and has a fall of twelve and a half feet, which could be raised to about eighteen feet by a five and a half foot dam, three hundred and fifty feet, more or less, long, across the crest. This would flood the water back to Lot 21, Concession VIII, and flood a strip five or six chains wide. The lower fall is situate on Lot 15, Concession X, and is twelve feet high, and could be raised to seventeen or eighteen feet, by a six foot dam, about one hundred and fifty feet long, across the crest of the fall. This would flood the water back about twenty chains on Lot 15, Concession IX, and flood an area about seven chains in width.

At the natural head the upper fall at low water would give 287 h.p., and the lower fall 276 h.p.

With a head raised to eighteen feet, which could be easily obtained, each fall would give 414 h.p.

At both falls the bottom is solid and the lower fall could be developed as above outlined at considerably less expense than the upper fall.

No possible storage basin of any capacity occurs in the township.

GENERAL REMARKS.

The gently undulating surface of this township gives facilities for easy drainage by means of the Bad and Trout Rivers, and the depth of the river valleys affords opportunity for draining even the low lying lands.

Any small islands marked on Bad River are simply exposed areas of bald rock or gravel and form part of the river bed.

Those parts of the township which have been burnt over will require the minimum of effort for clearing and preparing for agriculture.

Provision seems to have been made for two railway stations within the Township of Mulloy, and this fact should prove attractive to prospective settlers.

We estimate that about sixty-five per cent. of the township may be classed as good farm land.

Accompanying this report are a general plan, a timber plan, field notes of the entire survey, also account in triplicate.

We have the honour to be,

Sir,

Your obedient servants,

(Sgd.) Speight & Van Nostrand.

Ontario Land Surveyors.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 25.

SURVEY OF THE SOUTHERLY EIGHT CONCESSIONS OF THE TOWNSHIP OF HANLAN, DISTRICT OF ALGOMA.

NORTH BAY, Ont., December 10th, 1912.

SIR,—I have the honour to submit the following report on the survey of the southerly eight concessions of the Township of Hanlan, in the District of Algoma, performed under instructions from your Department, bearing date of June 5th, 1912.

The survey was commenced at an iron post planted by O.L.S. Speight to mark the corner between the Townships of Hanlan, Casgrain, Kendall and Way. This is the south-east angle of the Township of Hanlan, and from this point the south boundary was run west astronomically a distance of nine miles to its intersection with the west boundary of the Township run by O.L.S. Speight, this point being 31 links south of the iron post planted by O.L.S. Speight to mark the south-west angle of the Township of Hanlan.

Posts were planted according to instructions, and the lines were run in the centre of the road allowances in every case except one. In this one case the lot line between Lots 6 and 7 was run on the easterly limit of the road allowance.

Iron posts were planted at the following points:—

- 1. At the intersection of the northerly limit of the road allowance along the National Transcontinental Railway with the side line between Lots 12 and 13, Concession 1, and marked "R" on the four sides.
- 2. At the north-west angle of Lot 28, Concession 6, and marked "R" on the north and west faces, Lot 28 on the east face, and Concession 6 on the south face.
- 3. At the intersection of the side line between Lots 12 and 13 with the line between Concessions 6 and 7, and marked "R" on four sides.
- 4. At the north east angle of Lot 1, Concession 6, and marked "R" on the east and north faces, Concession 6 of the south face and Lot 1 on the west face.
- 5. The iron posts planted by O.L.S. Speight at the south-east and south-west angles of the Township were marked "R" on all sides.

On the 20th of August I had the misfortune to have a piece of wood pierce my wrist; and on account of blood poisoning setting in, necessitated my coming out to North Bay. After my return to the survey on the 7th of September my wrist gave me considerable trouble and I had to be in Hearst every few days to get medical attention. On my return to North Bay on the 26th of October, it was necessary for me to go to Toronto and have an operation performed on my wrist and a large piece of wood extracted, which kept me under the doctor's care for over a month. Hence the delay in completion of survey and filing of notes. Rain also retarded the progress of the work, and owing to so many days' rain astronomical observations were few, but were taken whenever possible.

GENERAL FEATURES.

The National Transcontinental Railway crosses Lots 13 to 28 in the south-westerly portion of the Township.

Evidence of a fire having been over the entire country about 75 years ago were seen every day.

The country in the southerly part of the Township is very level, but it becomes more or less hilly at the northerly part of the survey.

Soil.

On the lower ground the clay subsoil is covered with a deposit of black muck. while on the higher ground there is clay and sand.

TIMBER.

Spruce is the prevailing timber in the flats ranging from 4 inches to 10 inches, while on the higher ground there are some larger ranging up to 20 inches diameter. Poplar and Balm of Gilead attain a large size up to 24 inches diameter. Balsam, White Birch, Tamarac and Cedar also are found up to 15 inches diameter. There are considerable areas covered thickly with small spruce and balsam up to 3 inches in diameter.

MINERALS.

There are several out-croppings of rock, but without any indications of economic minerals.

GAME.

Moose are quite plentiful, although no red deer were seen. Rabbits, partridge, muskrats, beaver and mink are also quite plentiful.

Accompanying this report are the field notes, plan of survey and timber plan.

I have the honor to be,

Sir.

Your obedient servant,

(Sgd.) G. P. ANGUS, Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines. Toronto, Ont.

Appendix No. 26.

SURVEY OF THE SOUTHERN PORTION OF THE TOWNSHIP OF CASGRAIN, DISTRICT OF ALGOMA.

AURORA, Ont., Nov. 24th, 1912.

SIR,—In pursuance with instructions bearing date June 24th, 1912, from the Honorable the Minister of Lands, Forests and Mines, to subdivide the southern portion of the Township of Casgrain in the District of Algoma, we beg to report as follows:—

With as little delay as possible we proceeded to the flourishing Town of Cochrane, the location of which requires no explanation. There we were joined by five Indians from the Golden Lake Reserve along with two chainmen and a cook which comprised our whole party. From there we proceeded by rail over the G.T.P. Railway which is still under construction to the Town of Hearst.

The Township of Casgrain is situated about two miles north of the G.T.P.. near the Town of Hearst, on the Mattawishquia River, which stream affords a navigable access, although in low water the numerous rapids that occur make the trip more or less arduous. In compliance with instructions our initial point was the south-east angle of the township. This was definitely defined by the wooden post and iron bar. This point we were also informed was the north-east angle of the Township of Kendall. Furthermore we were instructed to utilize the posts planted on the northern boundary of the Township of Kendall, if we found no great discrepancy. On arriving at the scene of operations we found that the northeast angle of the Township of Kendall was four chains and seventy-eight links east of the south-east angle of the Township of Casgrain, so we were unable to utilize the posts planted by O.L.S. J. S. Dobie.

However, we subdivided the south eight concessions in the usual way, and in accordance with instructions. The existing iron bars at the angles of our township we marked in the usual way, and planted five others as are shown in the field notes.

A number of lakes along with the Mattawishquia River and a small river at the west side of the township were met with. While the lakes covered a fair area of land they were nearly all shallow, averaging only about three or four feet deep in low water. The Mattawishquia River is a navigable stream throughout the township ranging from four to five chains wide. The other streams while about one chain wide are unfit for navigation, except for about one mile where it approaches its destination.

While the presence of game was not entirely wanting, very few moose or deer were seen. Pike and pickerel were found in abundance in the rivers.

Although several large outcrops of rock were to be met with, as regards the presence of economic minerals we found no traces whatever.

The township is clothed with spruce and poplar ranging from six to fifteen inches in diameter with patches of balsam, birch and cedar. While a greater portion of this timber could only be utilized as pulp wood, some no doubt, would approach the merchantable class.

The major portion of the land is especially adapted for agricultural purposes, being a light clay loam, with in most cases, a natural drainage to the river.

Although climatic conditions are not all that could be desired, if last year was any indication, as soon as the agency of civilization approaches, agricultural pursuits should be a thriving industry.

The following iron posts were planted and marked as follows:-

At the south-easterly angle of the township a 134 inch iron post marked on the north-west "Casgrain," on the north-east "Shannon," on the north IX M 50 lks. and "R" on the north, south, east and west sides.

At the south-east angle of Lot 13, Concession 1, a 11/4 inch iron post marked "Con. 1" on the north face, "Lot XIII" on the west face and "R" on the south and east faces.

At the south-west angles of the township a 134 inch iron post marked "Kendall" on the south-east face, "Cascrain" on the north-east face and "R" on the south, east, west and north faces.

At the north-east angle of Lot 1, Concession VI, a 11/4 inch iron post marked "Con. VI" on the south face, "1" on west face and "R" on east and north faces.

At the north-east angle of Lot 13, Concession VI, a 11/4 inch iron post marked "Lot XIII" on west face, "Con. VI" on the south face and "R" on the north and east faces.

At the north-east angle of Lot 28, Concession VI, a 1¼ inch iron post marked "R" on the north and west faces, "Con. VI" on the south face and "XXVIII" on the east face.

At the north-east angle of Lot 13, Concession VIII, a 11/4 inch iron post marked "XIII" on the west face, "Con. VIII" on the south face and "R" on the north and east faces.

Accompanying this report, plans, field notes and accounts, all of which are respectfully submitted.

We have the honor to be,

Sir,

Your obedient servants,

(Sgd.) COLTHAM & COLTHAM,
Ontario Land Surveyors.

The Honorable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 27.

SURVEY OF THE TOWNSHIP OF STODDART, DISTRICT OF ALGOMA.

NEW LISKEARD, Oct. 15th, 1912.

SIR,—In accordance with instructions dated May 21st, 1912, to survey the Township of Stoddart, in the District of Algoma, along the line of the National Transcontinental Railway, I herewith present my report.

Practically the whole of the township is good agricultural land, there are scarcely any rock exposures, and while there are what might be termed spruce swamps, these will no doubt dry out as fast as cleared of the timber, as the natural drainage of the township is excellent. There was but one muskeg met with, that being on the line between lots Nos. 24 and 25 on either side of the T.C. Ry.

The timber as a rule is light and of no material value, a good deal of it is too small for pulpwood, being of quite recent growth, but there are a few patches of spruce that run up to sixteen inches in diameter, although a considerable quantity of this has been used for bridge timber on the railway construction. Along the shores of the lakes and rivers, considerable cedar of fair size was met with.

There is quite a large area of water in this township. Lakes St. Joseph and. Pewabiska are the largest bodies. The islands are few, in the former lake there are but two small islands, in the latter only four, within the limits of the township. In Fort Lake is found the largest island, there being fifty-five acres in it.

Lake Pewabiska can be easily reached from the N.T.C. Railway by boats or launches of small draught, with a little work of blasting and cleaning the channel at one point.

The streams are all very sluggish, with scarcely any perceptible current, but the water is quite pure and clear though it appears black. One exception is the Kabinagagami River, which is very swift.

Pewabiska Lake, which extends for miles beyond Stoddard Township and is dotted with islands will no doubt some day make a beautiful summer resort.

The rivers abound in fish of considerable size, particularly pike and pickerel. There may be trout, but none were seen. The season of the year may have had something to do with this. Traces of moose were often noticed. Not one of the party, however, saw a moose, althugh we sometimes heard them. Of the fur bearing animals muskrat were very plentiful, mink were seen and fresh traces of beaver work noted. Wolves were heard on one occasion, but not a sign of red deer was seen.

The lines of the township were all run with a transit theodolite and measured with steel band chains. The lakes and rivers were traversed partly by triangulation and partly with stadia and with micrometer, the bearings being all obtained with the transit.

Iron posts were planted in the centre of the concession road allowance between lots 12 and 13 on the south boundary of the township, between lots 12 and 13 on the line between the 6th and 7th concessions and on the north boundary of the township at the east limit of lot numbered 13. Similar posts were planted between concessions VI and VII where the same intersects the east and west boundaries of the township. These iron posts were marked as shewn in the field notes prepared of the survey of this township.

Of the land in the township, I estimate that 80 per cent. of it is arable without any artificial drainage to speak of, and 10 per cent. more can be made so with drainage, and possibly more than this.

The total acreage of the lots is	45,792.34	acres
The total acreage of the roads is	1,758.61	acres
The total acreage of water is	$4,\!236.7$	acres
The total acreage of islands is	69.25	acres
The total acreage of Ry. lands is	161	
Total	52.017.9	acres

All of which is respectfully submitted.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) C. H. FULLERTON.

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines, Province of Ontario.

Appendix No. 28.

SURVEY OF THE TOWNSHIP OF STUDHOLME, DISTRICT OF ALGOMA.

ALVINSTON, Feb. 26th, 1912.

SIR,—I have the honor to submit the following report of survey of the Township of Studholme in the District of Algoma on the T.C.Ry. and Kabinagagami River made under instructions bearing date the 17th day of June, 1912.

I left Alvinston August 1st, and proceeded to Cochrane, and after arranging for supplies, canoes, men, etc., I proceeded by contractor's train to Kabinagagami River.

After observation on Polaris at E. Elongation at the East Boundary at Con. VI/VII I proceeded to subdivide the township as instructed and to run the south boundary.

This township is surveyed under the nine-mile system with the exception that the T.C.Ry. will form the boundary between Cons. VII and VIII across lots four io eight inclusive, and between Cons. IX and X across lots thirteen to eighteen inclusive, and I have laid off the lots as shown by the plan and field notes as instructed.

Commencing at the east boundary at Con. line VI and VII I ran west to the road allowance between lots six and seven, and after running south the proper distance I ran the south boundary east and west from this line, intersecting the east boundary at a point 28 links south of the post planted by Mr. T. B. Speight, O.L.S., and intersecting the west boundary at a point 40 links south of the post planted by Mr. Speight.

I then proceeded to lay off the lots in the usual way, checking the lines by observation as shewn in the field notes. Owing to the wet and cloudy weather it was rather difficult to obtain many observations, but sufficient were taken for the progress of the survey.

The survey was made with transit and the lines have been well opened out and blazed. Posts have been made of the most durable timber obtainable. In only a few cases have posts other than spruce, cedar and tamarac been planted. The posts are marked with a scribe and driven in as far as possible.

The following iron posts were planted:-

On South Boundary at the centre of road allowance between lots 12 and 13; 11/4 inch iron marked on south "R"; On north "Con 1-R"; On east "Lot XII-R"; On west "Lot XIII-R."

On Con. Line VI/VII and road allowance between lots 12 and 13, 1¼ inch iron post marked, On north, "Con. VII-R"; On south, "Con. VI-R"; On east, "Lot XII-R"; on west "Lot XIII-R."

On north boundary and road allowance lots 12 and 13, 1¼ iron post marked, On south "Con. XII-R"; On north "R"; On east "Lot XII-R"; On west "R."

On east boundary at road allowance between Cons. VI and VII, 1¼ inch iron post marked, On north "Con VII-R"; On south, "Con. VI-R"; On west, "Lot 1-R"; On east "R."

On west boundary on road allowance between Cons. VI and VII, 1¼ inch iron post marked, On north "Con. VII-R"; On south, "Con VI-R"; On east, "Lot XXVIII-R"; On west "R."

There are as well 1¾ inch iron posts planted at the north-east and north-west angles of the township planted by Mr. Speight on the survey of boundary lines.

GENERAL FEATURES.

The Township of Studholme is undulating or generally level and fairly dry with the exception of the south-east quarter which is of a swampy nature, this can, however, be easily drained as the fall is generally good and is probably the best section of the township.

Reference might be made to the Timber Map in forming a general idea of the nature of the township; Area No. 1 is a level swampy tract with clay subsoil and muck or loam top of about four inches depth; Area No. 2 is undulating and is of a sandy clay or sandy nature with gravel in places.

Along the line lots 18/19 through concessions 7 to 10 inclusive the country is somewhat broken with deep gullies; Area No. 3 is a level belt with a sandy clay subsoil and a loam or muck top similar to Area No. 1, but this area (No. 3) has not so much swamp as Area No. 1.

Approximately seventy per cent. of the land might be termed arable, and there is very little muskeg, and from the growth of potatoes, lettuce, radishes, turnips and carrots planted along the railway line at Kabinagagami River there can be no question of the adaptability of this country for agricultural purposes, although this township does not appear to be, taken generally, as good as the land to the west and to the east. Excellent hay is seen along the line of the railway in places.

The fine quality of gravel in this township at Pit 1 and Pit 3 T.C.Ry. will

be valuable for constructing roads.

Numerous lakes occur within the township, and the Kabinagagami River flows along the eastern portion. Above the 8/9 Con. road, the river is good for travel, but below this a series of rapids occurs which renders it quite unfit for canoe travel.

Soil.

In general the soil is of a sandy clay nature, and should be easily workable, and possibly this soil is preferable to a stiff clay soil. Nearly all the township has a top layer from two to four inches of loam or muck.

TIMBER.

The timber consists of a good growth of Spruce, White Birch, Poplar, dead Tamarac; and Balsam, with a few Balm of Gilead and Cedar. The underbrush is rather thick and of alder, moose maple and hazel. The size of timber runs from four to eighteen inches, and in places twenty-four inches. Much of the Tamarac and Spruce along the railway has been made into ties and care will have to be exercised in this section in order to prevent fires spreading in the tops and brush left.

The general timber is large enough for building purposes and some good pulpwood can be cut. There are some belts of White Birch toward the centre of the township along the railway which might be used for the manufacture of charcoal and wood alcohol.

MINERALS.

No mineral indications were found in this township. The few exposures of rock are of Huronian origin.

WATERS.

The Kabinagagami River is a stream about 31/4 chains wide with rather dark water, but quite wholesome. There is a fair current. The river is broken with rapids in Con. VI, where a power of 1,400 horse-power may be developed at an average flow.

At the railway in Con. VII, a power of 2,300 horse-power may be developed In Cons. IX and X a long flat rapids occurs, but owing to the wide flats it might be difficult to develop power.

In Con. XI at a chute, about 1,400 horse-power may be developed. The Traverse Notes show the reservations I would recommend.

Constance Lake consists of a shallow body of water with a sandy bottom, and along the south, west and north portions of the shore the lake is very shallow for a considerable distance out.

The water of the numerous lakes is quite clear.

FISH AND GAME.

Game in the vicinity of the railway is scarce. A few signs of moose were seen, but very few of bear and none of deer or caribou.

There are numerous beaver and muskrat and a few mink.

The fish consists of pike, pickerel and some brook trout, and are quite plentiful.

There are plenty of ducks, but partridges were this year rather scarce owing no doubt to the wet season.

VARIATION OF THE MAGNETIC NEEDLE.

The magnetic variation runs from 4 degrees to 81/4 degrees west, but generally the variation is about 6 degrees west and fairly constant.

I submit with this report.

- 1. Field Notes of the Survey.
- 2. Traverse Notes of the Waters.
- 3. A General Plan.
- 4. A Timber Plan.

All of which is respectfully submitted.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) A. S. Code,

O.L.S., C.E.

The Honourable, the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 29.

SURVEY OF THE TOWNSHIP OF SHACKLETON, DISTRICT OF TIMISKAMING.

GUELPH, March 22nd, 1913.

SIR,—I have the honor to submit the following report and field notes of the survey of Shackleton Township in the Timiskaming District, surveyed under instructions from your Department, dated May 22nd, 1912.

This township is on the line of the National Transcontinental Railway, about fifty miles west of Cochrane. The railway enters the township from the east between the ninth and tenth concessions and forms the line between these concessions to the side road between lots twelve and thirteen and from lots thirteen to eighteen it forms the line between concessions ten and eleven, and from lots nineteen to twenty-four the line between concessions eleven and twelve, it passes through the townsite of Alexandra and crosses the north boundary at lot number twenty-seven.

The township is laid out into lots of 150 acres each, except in those concessions fronting on the railway. The survey lines were run in the centres of the road allowances and the lot posts offset fifty links on each side of the survey line, a witness post being planted on the line opposite each lot corner. The lot posts were marked with the lot numbers on the east and west sides, and the concession number on the north or south side, and R on the side next the road allowance in the usual manner. Iron posts were planted beside the wooden posts of the points indicated on the plan.

The township is traversed from south to north by the Ground Hog River which enters it at lot 27, Con. 1 and flows north and northwesterly till in Con. 7, the main channel cuts the west boundary and forms the boundary of the township, for a short distance. In the eighth concession it takes a north-easterly course and leaves the township in the Alexandra Townsite. The river varies in width from four to eight chains and is from three to eight feet in depth and flows with a fair current. There are no rapids nor waterfalls within the township. A careful stadia survey was made of the river and plotted on a scale of ten chains to an inch.

The central part of the township is drained by Wellington Creek which enters at lot 10, Con. 1, and flows northward till it crosses the N.T.C. Ry. at lot 13, and turning westward in the eleventh concession it crosses the north boundary at lot 22.

With the natural drainage afforded by those streams the swamps in this township are comparatively small in extent, the largest swamp being along the railway in the northeast corner of the township.

Four lakes were found within the township besides the one which crosses the north boundary. Two of these are each about a mile and a quarter in length by a quarter of a mile in width, the others are comparatively small.

There are numerous rock exposures along the river and some small ridges of rock in different parts of the interior but as a whole the surface of the township is not broken and probably sixty per cent. of the land in it can be brought under cultivation without much expenditure for drainage. The soil is clay and where the land has been cleared around the old construction camps the excellent

growth of timothy and clover which has sprung up and the garden vegetables grown by the residents in Alexandra would indicate in a measure the adaptability of the country for farming.

The township contains a large amount of poplar and spruce timber with some balsam, cedar and white birch. The poplar is of good quality and runs from twelve to twenty-four inches in diameter of the stump.

There is also a considerable amount of large spruce and a great deal of a size suitable for pulpwood. Most of the large timber close to the railway and along the Ground Hog River in Cons. 9, 10, 11 and 12 has been cut for construction purposes or for railway ties.

I have the honor to be,

Sir,

Your obedient servant,

(Sgd.) James Hutcheon,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forest and Mines, Toronto, Ont.

Appendix No. 30.

SURVEY OF THE TOWNSHIP OF SARGEANT, DISTRICT OF TIMISKAMING.

OTTAWA, December 26th, 1912.

SIR,—I have the honor to submit the following report of our field operations during last season, on the survey of the Township of Sargeant, sixty miles east of Cochrane on the National Transcontinental Railway and north of Lake Abitibi.

On receipt of your instructions dated May 21st, 1912, we, "Mr. Andrew Bell and N. J. Slater," proceeded from Ottawa June 12th to North Bay, where we purchased our supplies. On June 14th we left for Cochrane and were obliged to remain there till June 21st, as our outfit did not come in; it having been forwarded by freight.

We left Cochrane June 21st, with seven men, for Aylen River, where we camped on the south side of tracks in old construction camp.

Saturday, June 22nd, commencing chaining and posting along railway from west boundary of township.

June 24th, we took observations on long tangent of Transcontinental Railway given as south 72 degrees 56 minutes east, and found it to be south 73 degrees 3 minutes 30 seconds east. The railway bearings had evidently been commenced from the boundary line between Ontario and Quebec and no corrections had been made for curvature. On June 25th, commenced to run side road between Lots 22 and 23, and on June 26th finished side road to north boundary.

Work went steadily on in the southern part of the township with two parties. On August 28th Mr. Bell decided to go to Cochrane, being ill, and never returned. Owing to construction going on the railway we found great difficulty in keeping men.

This township is well timbered with timber suitable for settlers' building purposes. The soil appears to be well adapted for farm purposes being mostly clay subsoil, covered with black muck, and, on the low lying land, moss. Muskeg holds the frost till late in the summer, probably July. We found it difficult to drive posts through the ice protected by a covering of moss, probably this ice accounts for cold nights during the summer season. The general opinion is that when the moss is removed the climate will alter.

The land in this township appears to be much better than that lying between it and Cochrane, also the land to the north and south of the township appears to

be of similar nature to that of the township.

The following iron posts were planted at the south-east angle of the township marked on the north "CON. 1" "SARGEANT" on the east "ROAD," on the west "LOT 1": at the north east angle of Lot 1, Concession 7, marking "R" on the north and east sides, "CON. VII." "SARGEANT" on the south and "LOT I" on the west; at the south-east angle of the township marked on the north "CON. 1" "SARGEANT" on the west "LOT XVII." and on the east "ROAD"; at the north-east angle of Lot 17, Concession 5, marked on the north "ROAD," on the east "ROAD," on the south "CON. V.," on the west "LOT XVII." "SAR-GEANT"; at the south-east angle of Lot 17, Concession 6, marked on the north "CON. VI.," on the west "LOT XVII." "SARGEANT," on the south and east "ROAD"; at the north-east angle of Lot 17, Concession 7, marked on the north 'ROAD," on the east "ROAD," on the south "CON. VII." "SARGEANT," on the west "LOT XVII."; at the north-west angle of the township, marked on the north "ROAD," on the east "LOT XXXIV," on the south "CON. VII." "SAR-GEANT," on the west "ROAD," and at the south-west angle of the township marked on the north "CON. 1" "SARGENT," on the east "LOT XXXIV.," and on the west "ROAD."

On September 18th I disbanded the party and left for Cochrane, having completed the survey according to instructions and finished by traversing the Okimodasik River and tieing to the Interprovincial Boundary Line.

I have the honor to be, Sir,

Your obedient servant,

(Signed) N. J. SLATER,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests, and Mines, Toronto, Ont.

Appendix No. 31.

SURVEY OF TOWNSHIP OF FAUQUIER, DISTRICT OF TIMISKAMING.

PARRY Sound, November 30th, 1913.

SIR,—I have the honour to report that under your instructions I surveyed the first eight concessions of the township of Fauquier, into farm lots.

I left Cochrane with my party on the 2nd of August and went into camp at Conmee Station, in the township, the same day, and commenced the survey of the township the next day by brushing out and chaining the south boundary from the south-east angle, where I found an iron and a wooden post both regularly marked and continued the survey, finishing my work the second of October.

The greater part of this township will make good farming land. Although a considerable portion of it is swampy, it appears to have good drainage. There is very little of what may be called muskeg in the township, and I only saw exposed rock on the west and south shores of Remi Lake. The soil throughout the township is clay loam.

The timber on the high ground is poplar, spruce, birch and balsam and in

the swamps is principally spruce.

There are several burnt areas in the township, the most of them tracable from the Transcontinental Railway, which passes through the township entering on the east side in Concession 1 and passing out on the west side in Concession VI. There are several places immediately along the Transcontinental Railway where an acre or two has been cleared up, or, rather, the old logs have been cut and piled up but not burnt (all in burnt section), but the parties who did the work were not on the ground when I was making the survey. The only one who had a house was a man named "Primeau," living with his family on Lot 12, Concession III. I saw no ground under cultivation. Primeau was a section foreman on the Transcontinental Railway.

I planted an iron bar post on the centre line of the south boundary, where it is intersected by the centre line of side road 12 and 13, marked on the north, east, west, and south with "R"; also planted an iron bar post on the centre line of said side road where it intersects the south shore of Remi Lake marked with "R" on the south, east, and west sides. I also planted an iron bar at the northwest angle of Lot 29, Concession VI., and at the north-east angle of Lot 1, Concession VI., both regularly marked for the respective lots.

I did not see any indications of mineral in the township. The rock formation is granite.

Remi Lake in the north part of the township is a clear water lake with plenty of fish, pike, pickerel, and whitefish. Other and smaller lakes in the township are said to have plenty of pike.

I observed Polaris for meridian at eastern elongation on Lot 12, Concession III.; on Lot 21, Concession V., and on Lot 13, Concession VI. The magnetic variation is 6 degrees 45 minutes west.

I have the honour to be, Sir,

Your obedient servant,

(Signed) DAVID BEATTY.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 32.

SURVEY OF HAY BAY IN THE TOWNSHIP OF FREDERICKSBURG IN THE COUNTY OF LENNOX AND ADDINGTON.

Peterborough, Ont., July 8th, 1912.

SIR,—I have the honor to report that, agreeable with your letter of May 20th last, I spent the 22nd and 23rd at your Department in getting all the information and data I possibly could which I thought might be of use to me in connection with my proposed survey and investigation as to the ownership of some large marshes in Hay Bay, in the Township of Fredericksburg, in the County of Lennox and Addington.

Having received tracings and instructions from your Department, dated May 29th, I proceeded to Napanee on June the 7th, where I met and consulted with Mr. Carscallen. I was, however, unable to see Mr. U. M. Wilson until the following day.

On June 17th I left Peterborough—taking my assistant with me. I also took a chainman along, as I learned that the farmers were very busy and that it was doubtful if I could employ a suitable man on or near the work. On the evening of the same day we reached the home of John Sherman, on Lot 6, Concession III., Township of Fredericksburg.

Having procured a satisfactory observation for azimuth on the morning of June 18th, I immediately proceeded to carry out your instructions by measuring up several of the lines between the respective lots, in order to ascertain if these lots contained two hundred acres, or thereabouts, as intended by the original survey and specified in the original Patents from the Crown.

I am pleased to report that all the lots measured by me show that the original patentees received approximately two hundred acres exclusive of the area of any marsh lying in front of said lots. With regard to locating the exact position of the rear line of these lots as intended in the original survey, I found some difficulty -this being a very old settled township I found that lots and parts of lots of various areas, shapes, and descriptions, have changed hands many times, so that -generally speaking-the lay-out of the township as now held by the various owners bears very little resemblance to that intended by the original survey. Between the rear end of the concession fronting on Hay Bay and the rear end of the concession fronting on the Napance River there are several gores or irregular shaped blocks of land. There is, however, as far as I could ascertain, no dispute whatever with regard to the location of the side lines, rear lines, or property lines between any of the various lots or parcels of land in this section of the township. All the property lines in this locality are well defined by old rail fences (in some places replaced in recent years by wire). These fences are well banked on both sides by stones which have been picked from the adjoining fields by successive generations.

From the best evidence I could get the shore line of Hay Bay has changed position very little during the past 128 years or since the original survey of the township was made; as evidence of this fact, I may say that a stone monument planted early in the last century to mark the intersection of the shore line of Hay Bay with the line between Lots 14 and C.C. now stands exactly, at what I would consider, the shore line of the present day. I might say, however, that I found the

water in Hay Bay exceptionally high this season, many of the older residents in this locality stating that it was as high as they had ever remembered seeing it

during the past fifty years.

Generally speaking the line of demarkation between the marsh and the land is well defined. The area of the marsh in front of these lots is, however, governed to a large extent by the rise and fall of the waters of Hay Bay, there being a considerable larger area of marsh in sight on my leaving there June 29th than there was to be seen on my arrival there June 17th.

The parties who claim they own the marsh adjoining their respective parcels of land are—

- (1.A) John J. Clark, owner of the west half Lot 9, Concession III.
- (2.A) Cornell's Island.
- (2) James Cuthill, owner of Lot D.D. Concession III.
- (3.A) Samuel Asseltine, owner of the rear or northerly half of Lot C.C. between the 2nd and 3rd concessions.
- (3.B) Samuel Asseltine owner of the front or south-easterly half of Lot C.C. between the 2nd and 3rd concessions.

Acting on the advice of the parties I was instructed to consult in connection with this matter—my survey and investigations were confined chiefly to the above five parcels of which I made a careful survey and also of the marshes adjoining them—the respective areas will be found on the accompanying plan—the area of the marsh being variable, the figures I give would, of course, only hold good when computed at the same height of water as when my measurements were made.

(1.A) West half of Lot 9, Concession III., patented to Alex. Hanna, now owned by John J. Clark, and described as follows:—"Commencing at the centre of the said lot on the north side of Hay Bay, then north 31 degrees west 105 chains 27 links, then south 59 degrees west 9 chains 50 links, then south 31 degrees east 105 chains 27 links more or less to Hay Bay, then north-easterly along the water's edge to the place of beginning, containing 100 acres."

As will be seen by the accompanying plan the above description encloses a small area of marsh 3.13 acres of which, in my opinion, the owner John J. Clark is entitled to. I do not think, however, that he has any claim or title to the

marsh 4.46 ac. lying in front of said lot.

- (2.A) Cornell's Island. Sold by the Indian Department May 30th, 1877, to Martin Shewman—now owned by John J. Clark and described as follows:—
 "All that parcel or tract of land situate, lying, and being in the County of Lennox in the Province of Ontario, in our Dominion of Canada, containing by admeasurement thirty-eight acres be the the same more or less, composed of the Island in the Bay of Quinte, known as Dockstatter's or Cornell's Island, situate, lying and being in Hay Bay, opposite lots numbers ten and eleven in the township of Fredericksburg." I find this island contains 42.87 acres, the line between the land and marsh all round the island is fairly well defined. In my opinion John J. Clark has no title whatever to the marsh adjoining or surrounding this island.
- (2) Lot D.D., Concession III., patented to James McNabb, now owned by James Cuthill, and described as follows:—"Commencing in front on the north side of Big Creek in the limit between Lots Nos. 13 and D.D. at the south-

east angle of the said lot tract, then north 31 degrees 30 minutes west 50 chains more or less to Little Creek, then southerly along the water's edge with the stream to Big Creek, then north-easterly up Big Creek to the place of beginning, containing 60 acres more or less." I find this Lot D.D. to contain 78.09 acre of land and 99 acres of marsh adjoining.

As will be seen by the accompanying plan both Big Creek and Little Creek—whose shore lines or "waters edge" are fairly well defined, are out in the marsh a considerable distance from the land, and I am of the opinion—from the wording of the above description—that James Cuthill is entitled to all the land and marsh enclosed by said description.

- (3.A) The rear or northerly half of Lot C.C., Concession III. Patented to David Bowen, now owned by Samuel Asseltine and described as follows:—"Commencing in the centre of the said concession in the limit between the said Lot C.C. and Lot No. 14, then north 31 degrees 30 minutes west 52 chains 63½ links more or less to the allowance for road in rear of the said concession, then south 50 degrees west to Hay Bay, then southerly along the edge of the said bay following its several turnings and windings in the said Lot C.C. to the centre of the said concession, then north 59 degrees east to the place of beginning, containing 150 acres more or less." I find this part of Lot C.C. to contain 91.50 acres of land with approximately 663 acres of marsh adjoining. I do not consider that Mr. Asseltine has any title to this marsh area.
- (3.B) The front or south-easterly half of Lot C.C., Concession III. Patented to Philip Smith, now owned by Samuel Asseltine and described as follows:— "Commencing in front of the said concession in the limit between the said Lot C.C. and Lot No. 14, then north 31 degrees 30 minutes west 52 chains, 63½ links more or less to the centre of the said concession, then south 59 degrees west to Hay Bay, then southerly along the edge of said bay, following it several turnings and windings in the said Lot C.C. to the allowance for road in front of the said concession, then north 59 degrees east to the place of beginning, containing 150 acres, more or less." I find this part of Lot C. C. to contain 76.27 acres of land, with approximately 129 acres of marsh adjoining. I do not consider that Mr. Asseltine has any title to the marsh area.

With regard to that part of your instructions to me in which you say: "You might call upon any of the people who claim to own the marsh lands under the grants from the Crown and explain matters to them, because they may not clearly understand that if they claim from the edge of the marsh instead of from the edge of Hay Bay they can only go back 105 chains 27 links according to their patents, and in the event of their owning marsh the probability is there will be a large amount of good land in the rear of their lots not belonging to them."

I was not long on the ground before I fully realized that it would be utterly useless on my part to offer this explanation—all the land owners interested in this matter are acting under legal advice—this marsh area yields a revenue of about \$2,000 a year in rat pelts, and all the parties I interviewed seem prepared to fight the matter to a court of last resort.

In conclusion, I beg to state that it seems very clear to my mind that according to the original surveys, plans and patents, the lots fronting on Hay Bay were intended to commence at the inner edge of the marsh—if the original surveyor intended that any of these Lots should include the marsh area in front, the lines between the respective lots as shown on the original plans would have been shown projected out to the outer edge of the marsh where deep water begins.

I will, perhaps, be pardoned for giving my opinion on what might be called the legal aspect of the question of title involved. I did not, however, consider that my report or plan would be complete and of use to your Department, without doing so.

All of which is respectfully submitted.

I have the honor to be, Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix 33.

RE-SURVEY OF CACHE LAKE, TOWNSHIP OF CANISBAY, ALGONQUIN NATIONAL PARK.

TORONTO, 29th May, 1913.

SIR,—We have the honour to submit the following report on the re-survey of Cache Lake, in the township of Canisbay, Algonquin National Park, under instructions from your Department bearing date 22nd January, 1913.

Immediately upon receipt of the instructions, arrangements were begun by correspondence with the parties referred to therein, and our party left here in charge of Mr. Ralph Mackenzie Anderson, O.L.S., a member of our firm, on 8th February. The work, involving a traverse of the whole shore of the lake and of the islands therein, was begun at once and prosecuted steadily, in accordance with instructions, until completed on 26th February.

In nearly all cases the lot angles sought were found to be defined by original posts or bearing trees. Wherever necessary, new posts were planted at the lot corners and shown as renewed in the accompanying field notes, but where the original cedar posts remained in good condition, they were left undisturbed. The intersections of all lot lines with the road allowance around the shore of the lake were marked with iron posts, and bearing trees were blazed and noted. All lines surveyed were well opened out and blazed.

The limits of lands already leased, wherever they intersected the shore line, were defined by posts and the lines opened out. The descriptions in some of these leases are somewhat at variance with the facts, owing chiefly to the insufficiency of data on record in the Department.

The part of Crown lease Number 1,816 lying south of the Grand Trunk Railway right of way is not shown on the blueprint furnished us with sufficient data to admit of its boundaries being actually defined on the ground, and in the absence of a written description from the lease, we were unable to define its limits.

In the case of Crown lease Number 1,841, the actual courses of the boundaries and tie lines differ from those set forth in the lease.

The actual area of the lands covered by the description in Crown lease Number 1,842 differs from that stated in the lease.

Crown lease Number 1,843, covering Treasure Island, does not appear to include more than the main island. There is, however, a smaller island to the north-east of the main island, hitherto not shown on recorded plans, and which, while too small for a separate holding, might prove a detriment to the lessee of the larger island, in the event of temporary occupation by undesirable persons.

In the case of Crown lease Number 1,856, the lands actually occupied and improved and intended to be covered by the lease lie considerably to the west of the land covered by the description in the lease.

Already in a number of cases houses have been erected on the shore and islands at points not covered by the leases included by the instructions furnished us. The location of these improvements has been carefully set down in the field notes and shown upon the plan.

Iron posts were planted at selected points throughout the traverse survey and their positions referenced by bearing trees duly blazed, marked, and entered in the field notes. Owing to the supply of iron posts being insufficient for the number of points to be perpetuated, trees were blazed on four sides and marked with the proper numbers, care being taken that the blazing did not unnecessarily injure the trees. The posts and trees referred to were numbered consecutively, C1, C2, C3, etc., around the shore were located, the consecutive numbering being then carried to the islands.

As directed by the instructions the part of the lake shore lying north of the railroad was examined as to its suitability for summer resorts and it was decided to be unnecessary to run lines or plant any posts for that purpose, as owing to its isolated position it is not probable that leases will be applied for in this part of the lake.

With regard to the physical features of the shore and islands in this lake, the land may be generally described as rising to an elevation of ten to fifteen feet above the present level of the water.

The following exceptions were noted: A ridge running from reference post C32 to C33 rises to about forty feet above the water. East of reference post C4 and extending for about five chains on either side of the east limit of Lot Number 8, Concession 5, a bluff rises to the height of one hundred feet. On the south shore of the Madawaska River where it enters the lake, a ridge rising to a height of about fifty feet leaves the shore at the mouth of the river and runs southwesterly inland. At the ends of the bays the shores are low-lying and somewhat swampy.

Particulars in detail of the various parts of the shore are given in the field notes. The country at a short distance back from the shores of the lake rises in some cases to a height of from one hundred and fifty to two hundred and fifty feet, affording good views of the surrounding scenery.

As nearly as we could ascertain, the present surface of the water is somewhat higher than would be the case in a state of nature, owing to the fact that the dam at the outlet, constructed during timber operations, has not been entirely removed, and if free vent were given it is to be expected that the lake level would be lowered. The level, therefore, depends upon whether the remainder of the dam is to be maintained or allowed to disappear in the course of time.

The shore line is in general rocky and somewhat similar in appearance to the Muskoka region.

The shores and territory inland are well timbered with hemlock, birch, cedar and spruce, with scattered red pine and occasional ridges of hard maple. This region having been within the area of lumber operations, all the more marketable pine and hemlock timbers have been taken off. Up to the present, fire has apparently done no damage in the immediate vicinity of Cache Lake. The timber on the larger islands is similar to that on the main land.

Accompanying this report are (a) a plan on scale 10 chains to one inch, (b) a plan on scale 4 chains to one inch, showing all traverse lines with courses and distances and other details, (c) field notes of entire survey.

We have the honour to be, Sir.

Your obedient servants,

(Sgd.) SPEIGHT AND VAN NOSTRAND,

Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 34.

SURVEY OF THE DAWSON ROAD LOTS DISTRICT OF THUNDER BAY.

LISTOWEL, December 2nd, 1912.

Sir,—In pursuance with your instructions, dated June 17th, 1912, I beg leave to report the following: On July 8th I left Listowel and proceeded to Port Arthur by steamer and rail via Port McNicoll, and arrived there on July 11th. I procured my outfit and most of my party at Port Arthur and started the work on July 13th. I had some difficulty in getting a cook to start the job; when you try to hire a cook and he finds he has to cook with an open fire, he generally gets drunk, and when the time comes and the train pulls out he is missing. I started the work by taking an observation on the bank of the Kaministiquia River and from this point I traversed the Dawson Road east and west. From Kaministiquia west I traversed the location according to the field notes, and when I got to the side road between Lots 30 and 31 I found that I was four chains and forty-four links north of the road. From this point west I traversed the road as it was built. A good many buildings were going up along the road and settlers were all using the old road as the boundary between concessions A and B. The old Dawson Road is in good condition from Lot 1 to Lot 80 at the Ascendage River, and if the underbrush and small trees were removed and the bridges and culverts rebuilt this road could be used for all kinds of traffic, pack trains, waggons or autos; one day last July an auto went from Port Arthur to Kaministiquia on the Dawson Road, a distance of 20 miles. Finlanders are the principal settlers in this section and they seem to be hard-working and industrious, most of their log buildings are very neat-

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ly built and when finished and properly calked will make warm houses. Most of these settlers have cows and chickens and they have most of them put up stacks of hay for the winter; quite an amount of grass grows along the rivers and creeks and in open places along the railway tracks.

I beg leave to report also that many of these settlers have gardens growing almost any of the more common kind of vegetables, such as potatoes, cabbage, turnips, lettuce, onions, radishes, but on account of the last season being very wet, some of the vegetables were beginning to rot, and did not do as well as if it had been a dry season. The land in this section is nearly all red clay, and clay loam. The country is hilly and there are no large muskegs or marshy land. In places the country is somewhat rocky, the most being west of Lot 55 and south of the Dawson Road. There are also a number of small gravel beds extending through the whole section. It is of good quality as can be seen along the Dawson Road.

I took considerable notice of the rocky country and found indications of iron in many places but found no indications of other more valuable minerals.

The timber throughout this area is nearly all second growth, especially the portions west of the Kaministiquia River where the C.P.R. crosses. Most of the timber is small and very little of it will be suitable for lumber. The different kinds found in order of their abundance, are jack pine to 12 inches. spruce to 12 inches, poplar, balsam, tamarac, white birch, a few white ash. Fire has destroyed a great portion of the timber. Large quantities of jack pine is still standing along the Dawson Road west of Lot 50 and could easily be made into cordwood and shipped out from Finmark on the C.P.R., or from the C.N.R. The country is well watered with small streams but the water is not as good as that found east of Port Arthur.

While engaged in the work I took five astronomical observations and checked the bearings of my lines with the C.P.R., C.N.R. and G.T.P. locations. On account of the season being wet the work was somewhat retarded. We worked nearly every day in the rain, and had the country been wet with swamps and muskegs, we could not have done the work in the same time. The eight iron posts provided by your Department were planted and marked according to your instructions at the tollowing places: S.E. corner, Lot 1, Con. 3. N.E. corner, Lot 11, Con. B. N.E. corner, Lot 8, Con. 2. S.E. corner, Lot 31, Con. A. N.W. corner, Lot 22, Con. 2. S.W. corner, Lot 22, Con. 2. S.W. corner, Lot 60, Con. A., and at S.W. corner, Lot 70, Con. B.

Regarding the old posts and lines of the former survey, I beg leave to say that the only evidence of a former survey I found was a post at the south-east corner of Lot 1, Concession B, and the side line between Lots 45 and 46, Concession A. This line and the line of my survey ran almost parallel for about 20 chains and only a few links apart, but before the end of the concession was reached the two lines crossed.

Many of the settlers along the Dawson Road were working on the railways as section men, and all those whom I had conversation with were quite satisfied to stay with their homesteads. All the buildings erected by the settlers are shown on the plan and field notes.

Whalen & Co., of Port Arthur, had a tic camp on the Matawin River bank on Lot 38, Concession A, where about one million railroad ties were taken out of the river and shipped to different points east and west. During the progress of the work the company employed about 75 men.

With regard to fish and game beg leave to say that this section is well supplied with rabbits and partridge, and a few wolves and porcupine. We tried the Matawin River and also the smaller streams but were not successful in getting any fish. The section is also well supplied with wild fruit, such as raspberries, strawberries, cranberries, and in one place we found quite a number of wild plums.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) E. D. Bolton,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 35.

RE-SURVEY OF PARTS OF THE TOWNSHIPS OF BLAKE AND CROOKS DISTRICT OF THUNDER BAY.

FORT WILLIAM, ONT., 7th April, 1913.

Sir,—In accordance with your instructions of the 7th November last, I have made a re-survey of certain parts of the Townships of Blake and Crooks.

As there was urgent need of certain lines in Crooks, I made a flying trip there, afterwards returning to the city for more men and outfit. Then, starting in Blake, I worked south, cleaning up the work as I went.

I commenced by re-opening two miles of the resurvey lines of O.L.S. Macdougail, and then ran south between sections 9 and 10, using this as a base line. Evidences of the old lines were very hard to find, and on this line between sections 9 and 10, I ran almost to the south limit of the township before finding any satisfactory evidences of the old lines to check by. The same is true to a great extent of the east and west lines, though once or twice in spruce swamps we found good evidences of the line.

A great number of comparatively recent compass lines have been run in Blake township, oftentimes blazed, and tending to confusion. At one point, too, I found a line with very old blazes, which, while not agreeing closely with our north and south chainage on our base line, I was inclined to accept it, until after opening it up for over a mile, I found it swung gradually to the south. In Crooks, too, I found lines well marked with old blazes, which were apparently run to mark mining claims which were never taken up. These lines, when first starting in, tended to create confusion and mislead.

A great number of lines had to be first run as trial lines and then rerun and opened up on the true line, after checking up on blazes two miles and more from the starting point.

Bearing trees or posts we very rarely found, except where we ran to mining locations, where they could usually be found. In this country the greater part of which has been lumbered over, and frequently burnt over, there were sometimes stumps standing which would seem to indicate the position of the bearing trees, but there was no means of identifying them, the tops being gone and the blaze. seems that if in addition to marking "B.T." on a tree in the usual way, some means of marking the tree lower down could be adopted, such as cutting three "V" marks on the upper part of the root beneath it, it would be very useful evidence when the "B.T." was gone, even if it were not given the same standing.

There is much good land in the two townships, particularly in Crooks. The country covered in Blake is very broken, and in many places it will be impossible to lay out roads along lot lines. The land will oftentimes rise steadily for possibly a mile and then drop almost sheer for from one to two hundred feet, but the land at top and bottom may be equally good.

There is not much large standing timber, but a great deal of old burnt pine stumps standing, making cutting very heavy in parts. In Blake there is some very fair pine scattered through, while in Crooks in addition to a little pine, there is, south of the Cloud River, quite a little pulpwood.

Every effort was made to plant the posts firmly in the ground, an old axe being carried for the purpose of cuting into the frost, but where the ground was stony, this was not very satisfactory, and I would suggest that you allow me to send two men over the lines as soon as the frost is out, to reset them. I would furthermore suggest the desirability of planting iron posts alongside the wooden ones on at least one line through these townships.

As all available teams had been hired at a premium by the Superior Brick Co., whose plant is now under construction at Rosslyn, it was costly to hire teams, and oftentimes almost imposible to get them at all. This caused me to move camp as little as possible, involving very long walks in difficult country, so that in the middle of winter it was necessary to leave camp before daylight, and often return after dark in order to accomplish anything. This was hard on the party, and with the comparative closeness of the railway, and the high wages being paid by the pulpwood camps in the vicinity, made it very difficult to hold the party together. Only the hiring of the best cook obtainable and putting on the best possible board held some of the men. My instructions were to hire the settlers as far as possible, but apart from my first trip into Crooks, all settlers willing to work were already engaged.

As instructed, I have not prepared any regular field notes or plans of the townships, but send herewith an outline plan showing the lines run.

I also beg to enclose accounts and vouchers in triplicate, and pay-list, in all amounting to \$2,630.80, of which I have already received \$2,000.00 on account.

I would also request that some allowance be made for camp equipment. spent \$175 in this way, and when the work was done it was of comparatively little value. For instance, I spent \$57.80 on tents but allowing for the cost of necessary repairs, they are probably not worth more than \$20. I spent \$75 on hardware, stoves and snow shoes, the latter are good for a lot of wear yet, but the heating stoves had to be renewed in the middle of the season, and the new ones were hardly worth bringing in on the completion of the work, and the other hardware was of little value. I bought \$42 worth of blankets to supplement the supply of the men. Allowing for the cost of the necessary cleaning, they are not worth more than half of this now. Under these circumstances, I would request that some allowance be made on this account.

I have the honour to be,

Sir.

Your obedient servant,

(Signed) E. R. BINGHAM,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 36.

SURVEY OF THE TOWNSHIP OF MATHIEU, DISTRICT OF RAINY RIVER.

FORT FRANCES, Ont., Dec. 27th, 1912.

SIR,—I have the honor to submit the following report on the survey of the Township of Mathieu, in the District of Rainy River, performed under instructions from your Department, dated the twenty-ninth day of May, A.D. nineteen hundred and twelve.

This township is bounded on the south by the Township of Dewart, on the west by the township of Morson, on the north by Sabaskong Bay of the Lake of the Woods, and on the east by unsurveyed lands.

I commenced work on the twenty-seventh day of July, having moved in by boat from the Town of Rainy River to the head of navigation on Big Grassy River; thence packing in to the west boundary of the township.

The east boundary of Morson and the north boundary of Dewart were cleaned out and the survey of the township of Mathieu commenced at its south-west angle. I did not find this point to agree with the field notes of the Township of Morson. I found four posts, a wooden and an iron post marked "Dewart" and "Tovell" and a wooden and an iron post marked "Morson." These posts stand all together at a distance of sixty-three links east from a two-inch-square iron post marked R. XXIV. XXV. E., so that there is no jog between Morson and Dewart as shown in field notes. I commenced at these four posts marking the iron post marked Morson with the name "Mathieu" on the east and I then laid out the second and other concessions and the side lines, west and north, astronomically, as directed in the instructions as nearly as possible.

The iron posts already planted at the south-east and the north-east angles of the Township of Morson were marked on their correct sides "Mathieu." The iron post at the north-east angle of the Township of Dewart was also marked on its correct side. Other iron posts, supplied by your Department, were planted, properly marked, as directed, alongside wooden posts, one at the intersection of the south boundary with the line between lots six and seven, one at the intersection of the

line in front of the fourth concession with this line of lots, and one at the lake shore on this same line; also one at the intersection of the west boundary with the line between concessions three and four, one at the intersection of the line between these concessions with the east boundary and one on the east boundary at the shore of the Lake of the Woods. These were planted with the view of insuring permanency for the survey in case of fire.

All lines run were well opened and blazed, substantial wooden posts were planted, as directed, every possible care being taken in the planting and marking of the posts, while frequent observations of Polaris, at eastern elongation, were taken to insure the correctness of the directions of the lines. The shore line of Sabaskong Bay of the Lake of the Woods was carefully traversed, courses being tied in to each post on the lake shore in passing.

The work itself was proceeded with in the ordinary manner, the excessive length of time taken in making the survey was entirely due to wet weather.

The township as a whole is rough, rocky and broken. The portion of it fit for agricultural purposes being very small, twenty-five per cent. at the most, consisting principally of a narrow belt along the valley of the Big Grassy River, and one lot in the valley of the Split-Rock River. A few good pieces could also be picked out along the shore of Sabaskong Bay. The south-west quarter of the township is composed of jack pine sandhills and muskeg, the south-east quarter is rock and muskeg, the north half is extremely rough and rocky.

For timber the township is of little value, there being nothing on it except small second growth jack pine growing on old brulé, with the exception of lots ten, eleven and twelve in concessions four, five, six and seven, which lots partially escaped the fire and have some good timber on them, chiefly jack pine with poplar and spruce and a few scattering red and white pines.

No indications of valuable minerals were observed; the magnetic needle holding a steady variation of eight degrees and thirty minutes east throughout the township. Samples of the country rock have been sent to your Department.

Accompanying this report are plan, field notes, timber plan and list of squatters.

I have the honour to be,

Sir,

Your obedient servant,

(Signed) D. J. GILLON,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines, Toronto, Ont.

Appendix No. 37.

ALGONQUIN PROVINCIAL PARK.

ALGONQUIN PARK, 31st October, 1913.

Honourable Sir,—I beg to hand you my annual report of the Algonquin Provincial Park for the fiscal year ending the 31st day of October, 1913.

This was one of the finest years from a tourist's standpoint in my recollection, and hundreds of visitors from Canada, the United States, Great Britain, and other countries, took advantage of it to spend their holidays on our splendid lakes.

The Park has also become popular as a winter resort, and the Highland Inn was patronized to its full capacity; in fact the management at times were not able to take all who wished to come. This is gratifying for several reasons. It proves that real benefit is being derived from the Park as a health and pleasure resort, and that one of the ends for which the Park was set aside has been accomplished; also, that the people of the Province are taking a deep interest in the Provincial Park and are in sympathy with the work being done in it.

A considerable revenue is now derived from fishing licenses and rents, as well as furs taken and live animals sold, amounting for the past year to: fishing licenses, \$1,782; rents, \$787.50; furs, \$5,424.10; live animals, \$605.25; fines, \$50; sale of logs, \$405.60; sundries, \$3.50; total, \$9,057.95.

The fishing during the past season has been good and some fine specimens were taken, the largest coming under my notice being a salmon trout seventeen pounds in weight. Some interesting specimens were taken in Delano lake that had the appearance of a hybrid, between the salmon and speckled trout. They have the form of the speckled trout with its markings, but have a very decidedly forked tail. One of these is described by Prof. Prince, of the Department of Marine and fisheries, Ottawa, in the following letter:—

OTTAWA, JANUARY 19TH, 1914.

DEAR MR. BABLETT:

The specimen of peculiar trout which you sent some time ago has been carefully examined, and as I already gave you a hint, it really appears to be a hybrid, namely, the brook-trout and the grey trout (or lake trout).

The dental features and the nature of the vomer, as well as the peculiar external color and the shape of the tail, all indicate a combination of two species, which as you know, are now separated further than they used to be.

The brook-trout and the lake-trout were at one time included under the same Genus, Salvelinus, but they have appeared to be so distinct as to now be separated into two Genera; the grey-trout being put in the Genus Cristivomer, a hybrid specially connected with two separate Genera is a remarkable occurrence, and some mention of it should be made in the sporting journals, as it is an exceedingly interesting occurrence.

You will remember that more than a year ago, in June, 1912, Mr. Gall sent a specimen of a fish which was regarded as a hybrid, and when I come to see you again, I should like to talk with you about the occurrence of the hybrid specimens, as the nature of the egg and the feature of hybridisation are so remarkable scientifically that it is worth while trying some experimental work to see if the hybrids can be produced artificially.

With all good wishes for the season, and thanking you for sending the specimens, I am.

Yours faithfully,

EDWARD E. PRINCE,

Dominion Commissioner of Fisheries.

A number of salmon trout fry and fingerling black bass were put into the lakes near headquarters.

We have a fine site for a fish hatchery, and I hope you will some day in the near future establish one here. We could then keep our lakes stocked and also supply outside sections.

Game of all kinds has very much increased. A number of beaver, otter, mink, marten, fisher, musk-rat, raccoon and ermine were taken and the skins disposed of, realizing \$5,424.10.

Live beaver and some live mink were also sold to the value of \$605.25. The former went to points in Prince Edward Island, Ontario, and the United States. There now being a great demand for live animals of all kinds for fur-farming purposes, we are in compliance with your instructions, preparing to supply the same from the Park. The prices for live animals are much greater than for pelts, and the departure is strictly in keeping with one of the objects in view when establishing the park, viz.: the multiplication and spread of our fur-bearing animals. The annual increase of these in the Park is so great that the number taken in the past three years has caused no perceptible diminution.

The capercallie introduced some years ago are not making the showing I would wish, although several were reported by reliable parties, as having been seen last year. They seem, however, to be working to the north and prefer the pine woods.

Wolves are still numerous and do a great deal of damage among the deer. We have secured sixty of the pests, and know that many were poisoned that our men did not get, owing to the snow covering up the tracks before they were found.

This has been an unusually good year for the deer, and fewer were killed by the wolves during the past winter than for any one of the past ten years. Deer are very abundant and moose are becoming more so; there is a yard of the latter within a few miles of headquarters.

Fires have been bad, a great many having been started by the locomotives on the Grand Trunk railway. I am glad, however, to be able to report no damage done in the Government limits, and elsewhere in the Park—most of them were over old burns. The Gillies Bros. had some pine burnt which is now being taken out. I should like to mention here that Mr. Colman, Superintendent of the Ottawa Division of the Grand Trunk railway, gave every assistance in his power and rushed men to the scene of the fires at once, also, gave strict orders to his men that they must give immediate assistance in case of fire.

The Grand Trunk railway have built a hotel and six cottages at Smoke Lake for the accommodation of visitors. These are of cedar logs, and fitted with all modern conveniences, such as fire-places, baths, etc. Each cottage will accommodate six to ten people, and there are several rooms in the main building. They have also guides' house, stables, etc. A like plant on a larger scale is now under construction at Big Island Lake. They have built a road from the Highland Inn at headquarters to each of these points, and run a stage on both of them.

The Canadian Northern Railway are pushing their branch through the north end of the Park, the steel being laid as far as Cedar Lake from the intersection with the Grand Trunk Railway to the west. This line follows some of our finest lakes, Kioshkoqui, Mink, Couchon, Aura Lee and Cedar, thence down the Petewawa to Pembroke. It will be a very popular route with the angler and canoeist, as these

lakes and rivers abound with the finest speckled trout and salmon trout. A great number of men are still employed on this line in the Park from Cedar Lake east.

REPORT OF THE

Our staff has been composed of twenty-six men and superintendent. During the trapping season their time has been taken up in patrolling the sections allotted them, two men travelling together. Owing to the constant demand for the men at fires, I have not been able to get all the shelter houses built I had hoped. We have built a very fine one at White Trout Lake, repaired several others, and cut out a lot of portages. The superintendent's house at headquarters has been reshingled and fresh drains laid down from both houses. Joe Lake dam has also been substantially repaired, so that a regular head of water can be held at this point, which is very necessary.

I have the honour to be, Honourable Sir,

Yours very sincerely,

The Honourable W. H. Hearst,

G. W. BARTLETT.

Minister of Lands, Forests and Mines, Toronto.

Appendix No. 38.

REPORT OF THE FORESTRY BRANCH.

SIR,—I have the honor to present herewith the First Annual Report of the Forestry Branch for the year 1913.

During the autumn of 1912, I was transferred from the Department of Agriculture to the Department of Lands, Forests and Mines. Since my transfer, the work in this Branch, has been largely concerned with general questions of reforestation and particularly the administration of the Norfolk Forest Station. This Branch has also had charge of the fire protection, along the railways in Ontario which are under the jurisdiction of the Board of Railway Commissioners for Canada. In addition to the above duties, various forest investigations and minor reports have been made and a course of lectures in forestry has been delivered to the students at the Ontario Agricultural College.

NORFOLK FOREST STATION.

The Norfolk Forest Station was started in 1909 and to-day contains 1,500 acres of land. This land is composed of sandy ridges and is made up of second-growth pine and oak; abandoned fields and blow sand ridges. The chief work being carried on at this station is the production of nursery stock for local planting and for distribution to prospective planters, throughout the Province.

FOREST NURSERIES.

The Forest Nurseries have produced during this last season a very good lot of planting material. There is at present in the nurseries 846,000 plants in nursery lines and 400,000 seedlings in seed beds.

The following is an approximate estimate of the nursery stock:-

In Nursery Lines.

White Pine	27,000
Scotch Pine	66,000
Red or Norway Pine	92,500
White Cedar	40,000
Bull Pine	7,000
Black Locust	80,000
White Ash	20,000
Sugar Maple	60,000
Soft Maple	20,000
Black Walnut	10,000
Butternut	4,000
Miscellaneous	20,000

In Seed Beds.

White Pine	300,000
Red or Norway Pine	100,000
Jack Pine	50,000
Miscellaneous	50,000

DEMONSTRATION PLANTATIONS.

At this station, about 300,000 young forest trees have been planted composed chiefly of:—white pine, red pine, Scotch pine, jack pine, black locust, red oak, chestnut and white ash.

The earliest plantings of 1909, in which white pine, Scotch pine and jack pine were planted upon pure sand formations, where the sand was blowing considerably, indicate that the best results will be obtained by the use of jack pine and Scotch pine. Many of the Scotch pine and jack pine, which were about twelve to fifteen inches in height at time of planting (1909) are now (1913) from four to six feet in height. Upon the better classes of soil white pine is proving more satisfactory and will be used wherever possible, as its ultimate value makes it more desirable than the other pines.

A plantation made with black locust in (1909) has not proven altogether satisfactory, although the growth during the first two years was quite remarkable, many trees having reached a height of eight to ten feet. During the last winter these trees were badly killed with the frost and the value of this tree, from the standpoint of hardiness, is as yet uncertain.

Various experiments are being conducted at this station along the lines of forest planting, which should give valuable data as to cost of planting; desirability of the various species and general results, which should prove of value in years to come. It is somewhat early to report upon the comparative values of planting in connection with this work.

FOREST TREE DISTRIBUTION.

In addition to an Experimental Station in Norfolk, it is desirable to demonstrate forest planting throughout the older parts of Ontario.

The percentage of well-stocked woodlands in Older Ontario is becoming very low. Many counties of Southern Ontario, possess less woodland than is to be found in the older countries of Europe. While the southern part of Ontario is largely made up of valuable agricultural land, there is still a large percentage of untilled soil that should have never been denuded. These waste areas are composed of steep hillsides; sandy or gravelly ridges and rocky outcroppings. It is highly desirable that the possibility of reforesting these areas, at a reasonable cost, should be demonstrated throughout Ontario.

As the necessity and practicability of reforesting is little appreciated in this new country, the Government has been carrying on, since 1905, a system of distributing forest trees to those desiring to plant as outlined in the following circular:—

CIRCULAR No. 8.

- 1. The Department of Lands, Forests and Mines of the Province of Ontario desires to assist farmers to improve their woodlots, and reforest waste portions of the farm. To accomplish this a system of co-operation is to be carried out as follows:
- 2. The Department, as far as the means at its disposal will permit, will assist in the growing of a forest plantation or woodlot, by directing through one of its officers as to the preparation of soil, varieties to plant and manner of planting, and as to care after planting.
- 3. The Department will also endeavor to furnish seedling trees or cuttings as planting material free of charge, but the person receiving such material shall pay the cost of transportation by express to nearest express office. 1,000 to 2,000 plants will range from 100 to 200 lbs. in weight. This season (1914) the trees will be shipped by

Canadian Express from St. Williams, Norfolk County. If the applicant desires to know about what the express charges will be he should find out from his local express agent the rate per 100 lbs. from the above shipping point. It is not considered safe to ship these plants by freight, and this Department cannot receive money to prepay transportation charges. Care should be exercised to fill in properly Post Office and Express Office in Application Blank.

4. The Department advises that those undertaking waste land planting make a start of one acre the first season. Two acres will be the largest area for which the Department will undertake to furnish planting material in any one year. Larger areas may be planted by arranging to continue the work throughout successive seasons. Prospective planters should read pages 15 to 30 of Farm Forestry Bulletin 209, Ontario Department of Agriculture, which will give a more detailed idea of what waste land planting means. Plants should be placed from 4 to 5 feet apart each way.

At 4 feet spacing an acre will require 2,722 trees.

At 5 feet spacing an acre will require 1.742 trees.

Make an estimate of your acreage and fill in the blank in application form accordingly.

- 5. It shall be understood that the owner, on his part, must prepare the soil, plant and care for the trees, and do all the actual work in connection with the plantations, in accordance with the directions of the officers of the Department. The owner shall also agree to provide protection for the planted trees against animals by fencing or otherwise, and where necessary, against fire by some effective means.
- 6. The Department prefers that plantations be made on such waste portions of the farm, as steep hillsides, light sandy, rocky or gravelly spots, swamp land, portions of farm cut off by streams or otherwise. Such land can usually be profitably devoted to wood production if proper species are planted. However, in certain localities without woodlands it may be found advisable to plant on good agricultural soil, if the owner so desires. In cases where tillable land is to be planted it will be advisable to summer fallow. Cultivation for one or two seasons after planting on good soils, where rank weed growth might follow, will be of great benefit to plantation.
- 7. The Department emphasizes the value of planting evergreen belts about open borders of woodlots. Planting in the woodlot is discussed on pages 11 and 12 of Bulletin 209.
- 8. It will be noticed that this system is co-operative in character. The Department furnishes planting material and expert advice, but does not guarantee to furnish any specific quantity of planting material. The Department reserves the right to accept or refuse applications if, in the opinion of the officers in charge, the location offered does not afford satisfactory facilities for the experimental and educational features of the work.
- 9. It is desired to make this work of educational value, and the owner will be required to allow public inspection of the planted areas, whenever this can be done without injury to the other crops.
- 10. Attention is called to the fact that the Forestry Department furnish trees only for forest plantation work on waste land, or land which is undesirable to till for annual crops. No fruit trees, ornamental trees or shrubs, trees for town or village lots will be supplied. Norway Spruce for hedges or windbreaks will not be supplied by this Department. As may be inferred from Bulletin 209, the planting material sent out under this system is unfit for roadside or ornamental planting, but is intended to make forest plantations.
- 11. All applications for material to be supplied this spring (1914) must be in on or before the 31st of March, 1914. Applications will be filled in order of their arrival. Late applications may have to be held over till next season if the material is exhausted.
- 12. Upon applying to the Forestry Branch, Parliament Buildings, Toronto, the applicant will be furnished with a blank form for the purpose of describing the area it is proposed to plant, which should be carefully filled out and returned to the Department.

Since the inception of this work about 2,000,000 forest plants have been distributed throughout Older Ontario. The annual distribution now reaches about 400,000, and demonstration plantings on waste land have been made in nearly every county of Older Ontario.

In addition to the distribution of trees for waste land planting, the Branch sends out collections of evergreens to public schools carrying on school gardening, so that the children may become familiar with the propagation of forest seedlings.

RAILROAD FIRE PROTECTION.

During this past season the Department has taken advantage of the Dominion Board of Railway Commissioners' General Order, to prevent fires along the right of way of railways coming under the jurisdiction of the Board.

The Board provides the legal measures to carry out fire protection and the Province through inspection and supervision sees that the Board's Order is fulfilled. The Provincial Forester was made Provincial Fire Inspector under the Board, with three District Fire Inspectors. The chief duties of these inspectors in carrying out the provisions of the Order, are as follows:—

To examine and report on locomotive equipment in relation to fire danger.

To report upon right of way conditions, in relation to fire hazard.

To supervise the disposal and burning of debris along the right of way.

To report all fires occurring along the right of way, giving cause and full description as far as possible.

The Text of the Board's General Order is contained in the following:-

DOMINION BOARD OF RAILWAY COMMISSIONERS (ORDER No. 107).

- 2. Until further order, every railway subject to the legislative authority of the Parliament of Canada, under construction or being operated by steam, shall, unless exempted by a special order of the Board, cause every locomotive engine used on the said railway, or portion of railway, being constructed or operated by it, to be fitted and kept fitted with netting mesh as hereinafter set forth, namely:
- (a) On every engine equipped with an extension smoke-box, the mesh shall not be larger than $2\frac{1}{2} \times 2\frac{1}{2}$ per inch of No. 10 Birmingham Wire Gauge, and shall be placed in the smoke-box so as to extend completely over the aperture through which the smoke ascends, the openings of the said mesh not to exceed a quarter of an inch and one-sixty-fourth (that is, seventeen sixty-fourths) of an inch to the square.
- (b) On every engine equipped with a diamond stack, the mesh shall not be more than 3×3 per inch of No. 10 Birmingham Wire Gauge, and shall be placed at the flare of the diamond of the stack, so as to cover the same completely, the openings of said mesh not to exceed three-sixteenths and one sixty-fourth (that is, thirteen sixty-fourths) of an inch to the square.
 - 3. Every such railway company shall cause:
- (a) The openings of the ashpans on every locomotive engine used on the railway, or portion of railway, operated or being constructed by it, to be covered, when practicable, with heavy sheet iron dampers; and, if not practicable, with screen netting dampers $2\frac{1}{2} \times 2\frac{1}{2}$ per inch of No. 10 Birmingham Wire Gauge, such dampers to be fastened either by a heavy spring or by a split cotter and pins, or by such other method as may be approved by the Board.
- (b) Overflow pipes from lifting injectors, or from water pipes from injector-delivery pipe, or from boiler, to be put into the front and back part of the ashpans and used from the first day of April to the first day of November, or during such portion of this period as the Board may prescribe, for wetting ashpans.

- 4. Every such railway company shall provide inspectors at terminal or divisional points where its locomotive engines are housed and repaired; and cause them, in addition to the duties to which they may be assigned by the officials of the railway companies in charge of such terminal or divisional points,
 - (a) To examine at least once a week,
 - (1) The nettings;
 - (2) Dead Plates;
 - (3) Ashpans;
 - (4) Dampers;
 - (5) Slides; and
 - (6) Any other fire-protective appliance or appliances used on any and all engines running into the said terminal or divisional points.
- (b) To keep a record of every inspection in a book to be furnished by the railway company for the purpose, showing:

(1) The numbers of the engines inspected;

- (2) The date and hour of day of such inspection;(3) The condition of the said fire-protective appliances and arrangements; and
- (4) A record of repairs made in any of the above mentioned fire-protective appliances.

The said book to be open for inspection by any authorized officer of the Board.

- (c) In case any of the said fire-protective appliances in any locomotive are found to be defective, said locomotive shall be removed from service and shall not (during said prescribed period) be returned to service, unless and until such defects are remedied.
- (d) Every such railway company shall also make an independent examination of the fire-protective appliances on all the locomotives of such company, at least once each month, and the conditions of such fire-protective appliances shall be reported direct to the Chief Mechanical Officer of the railway company, or other chief officer, held responsible for the condition of the motive power of the said company.
 - 5. No employee of any such railway company shall—
- (a) Do, or in any way cause, damage to the netting on the engine smoke-stack or to the netting in the front end of such engine;
- (b) Open the back dampers of such engine while running ahead, or the front dampers while running tender first, except when there is snow on the ground, and it is necessary to take such action in order to have engine steam properly;
- (c) Or otherwise do or cause damage or injury to any of the fire-protective appliances on the said engines.
- 6. No such railway company shall permit fire, live coals, or ashes to be deposited upon its tracks or right of way, unless they are extinguished immediately thereafter, except in pits provided for the purpose.
- 7. No such railway company shall burn lignite coal on its locomotive engines as fuel for transportation purposes, unless otherwise ordered by the Board.—lignite coal consisting of and including all varieties of coal between peat and bituminous, with a carbon-hydrogen ratio of 11.2 or less, such ratio being based on analysis of air-dried coal.
- 8. Every such railway company shall establish and maintain fire-guards along the route of its railway as the Chief Fire Inspector may prescribe. The nature, extent, establishment and maintenance of such fire-guards shall be determined as follows:
- (a) The Chief Fire Inspector shall each year prepare and submit to every such railway company a statement of the measures necessary for establishing and maintaining the routes of such railways in a condition safe from fire, so far as may be practicable.
- (b) Said measures may provide for the cutting and disposal by fire, or otherwise, of all or any growth of an inflammable character, and the burning or other disposal of debris and litter, on a strip of sufficient width on one or both sides of the track; the ploughing or digging of land in strips of sufficient width on one or both sides of the track; and such other work as may, under the existing local conditions and at reasonable expense, tend to reduce to a minimum the occurrence and spread of fire.

- (c) Said statements of the Chief Fire Inspector shall be so arranged as to deal with and prescribe measures for each separate portion of such railway upon and adjacent to which the fire risk calls for specific treatment. The intention shall be to adjust the protective measures to the local conditions and to make the expense proportionate to the fire risk and possible damage.
- (d) Said statements of the Chief Fire Inspector shall prescribe dates on or within which the foregoing protective measures shall be commenced and completed, and the fire guards maintained in a clean and safe condition.
- (e) No such railway company shall permit its employees, agents, or contractors to enter upon land under cultivation, to construct fire-guards, without the consent of the owner or occupant of such land.
- (f) Wherever the owner or occupant of such land objects to the construction of fire-guards, on the ground that the said construction would involve unreasonable loss or damage to property, the company shall at once refer the matter to the Board, giving full particulars thereof, and shall in the meantime refrain from proceeding with the work.
- (g) No agent, employee, or contractor of any such railway company shall permit gates to be left open or to cut or leave fences down whereby stock or crops may be injured or to do any other unnecessary damage to property, in the construction of fireguards.
- 9. In carrying out the provisions of Section 297 of *The Railway Act*, which enacts that "the company shall at all times maintain and keep its right-of-way free from dead or dry grass, weeds and other unnecessary combustible matter," no such railway company or its agents, employees or contractors shall, between the first day of April and the first day of November, burn or cause to be burned any ties, cuttings, debris, or litter upon or near its right-of-way, except under such supervision as will prevent such fires from spreading beyond the strip being cleared. The Chief Fire Inspector or other authorized officer of the Board may require that no such burning be done along specified portions of the line of any such railway, except with the written permission or under the direction of the Chief Fire Inspector or other authorized officer of the Board.
- 10. The railway company shall provide and maintain a force of fire rangers fit and sufficient for efficient patrol and fire-fighting duty during the period from the first day of April to the first day of November of each year; and the methods of such force shall be subject to the supervision and direction of the Chief Fire Inspector or other authorized officer of the Board.
- 11. The Chief Fire Inspector shall, each year, prepare and submit to each and every railway company a statement of the measures such railway companies shall take for the establishment and maintenance of said specially organized force. Said statements among other matters may provide for—
- (a) The number of men to be employed on the said force, their location and general duties, and the methods and frequency of the patrol.
- (b) The acquisition and location of necessary equipment for transporting the said force from place to place, and the acquisition and distributing of suitable fire-fighting tools; and
- (c) Any other measures which are considered by him to be essential for the immediate control of fire and may be adopted at reasonable expense.
- 12. Whenever and while all the locomotive engines used upon any such railway, or any portion of it, burn nothing but oil as fuel, during the aforesaid prescribed period, under such conditions as the Board may approve, the Board will relieve the said railway of such portion of these regulations as may seem to it safe and expedient.
- 13. Every such railway company shall instruct and require its sectionmen and other employees, agents and contractors to take measures to report and extinguish fires on or near the right-of-way as follows:—
- (a) Conductors, engineers, or trainmen who discover or receive notice of the existence and location of a fire burning upon or near the right-of-way, or of a fire which

threatens land adjacent to the right-of-way, shall report the same by wire to the Superintendent, and shall also report it to the agent or persons in charge at the next point at which there shall be communication by telegraph or telephone, and to the first section employees passed. Notice of such fire shall also be given immediately by a system of warning whistles.

- (b) It shall be the duty of the Superintendent or agent or person so informed to notify immediately the nearest forest officer and the nearest section employees of the railway, of the existence and location of such fire.
- (c) When fire is discovered, presumably started by the railway, such sectionmen or other employees of the railway as are available shall either independently or at the request of any authorized forest officer proceed to the fire immediately and take action to extinguish it; provided such sectionmen or other employees are not at the time engaged in labours immediately necessary to the safety of trains.
- (d) In case the sectionmen or other employees available are not a sufficient force to extinguish the fire promptly, the railway company shall, either independently or at the request of any authorized forest officer, employ such other labourers as may be necessary to extinguish the fire; and as soon as a sufficient number of men, other than the sectionmen and regular employees, are obtained, the sectionmen and other regular employees shall be allowed to resume their regular duties.
- (e) The provisions of this section shall apply to all fires occurring within 300 feet of the railway track, unless proof shall be furnished that such fires were not caused by the railway.
- 14. Every such railway company shall give particular instructions to its employees in relation to the foregoing regulations and shall cause such instructions to be posted at all stations, terminals and section houses along its lines of railway. In case said instructions are not also carried in employees' time tables during said prescribed period, or in "operating" and "maintenance of way" rule books, they shall, previous to April 1st of each year, be re-issued to all employees concerned, in the form of special instructions. The Chief Fire Inspector may waive the above requirements in whole or in part, as to lines or portions of lines where, in his judgment, the fire danger is not material.
- 15. Every such railway company allowing or permitting the violation of, or in any respect contravening or failing to obey any of the foregoing regulations, shall, in addition to any other liability which the said company may have incurred, be subject to a penalty of one hundred dollars for every such offence.
- 16. If any employee or other person included in the said regulations, fails or neglects to obey the same, or any of them, he shall, in addition to any other liability which he may have incurred, be subject to a penalty of twenty-five dollars for every such offence.
- 17. The Board may, upon the application of any railway company or other party interested, vary or rescind any order or direction of the Chief Fire Inspector made pursuant to the provisions of this Order.

(Sgd.) H. L. DRAYTON, Chief Commissioner, Board of Railway Commissioners for Canada.

I have the honour to be, Sir,

Your obedient servant.

E. J. ZAVITZ, Forester.

The Honorable W. H. Hearst,
Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 39.

SUPPLEMENTARY LIST OF LICENSED CULLERS, 1913.

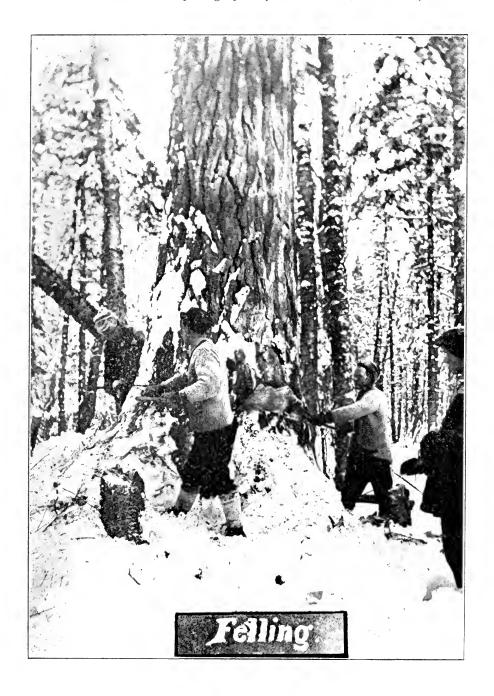
(For complete list see Minister's Reports 1911 and 1912.)

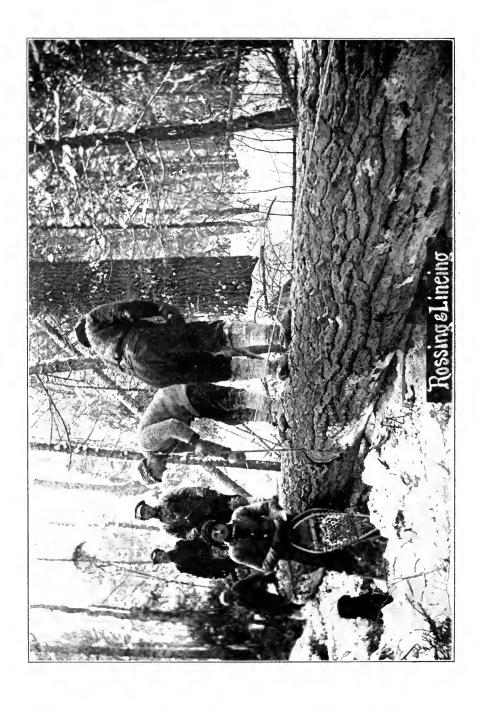
NAME OF CULLER.	Post Office.
Buchan, A	.Fort William.
Cameron, Ronald	.Ignace.
Cole, J. E	. Kenora.
Currie, J. E	. Kenora.
Duncan, Edward J	. Sturgeon Falls.
Hammond, Henry	.Dryden.
Love, B	. Port Arthur.
Marr, H. J	.Superior Junction.
McDonald, Thos	. Kenora.
Nash, John	.Kenora.
Nesbitt, Thomas	. Kenora.
Pehill, Walter	.Dryden.
Robertson, J. D	. Kenora.
Richardson, C. R	. Fort Frances.
Sparling, S. W	. Richan.
Smith, L. G	. Worthington.

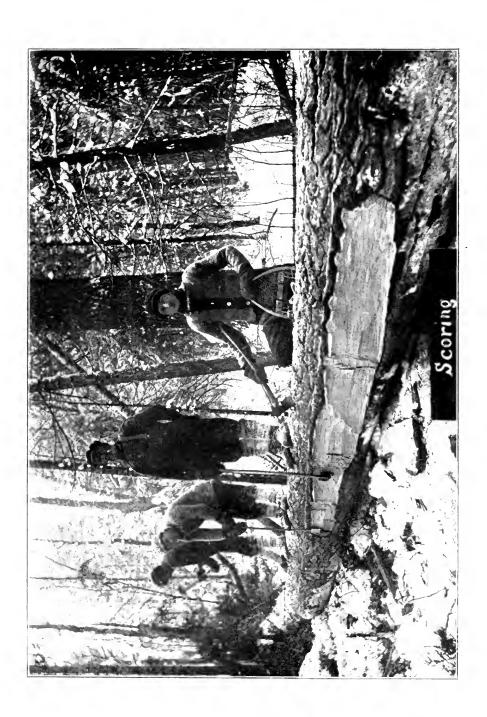
Appendix No. 40.

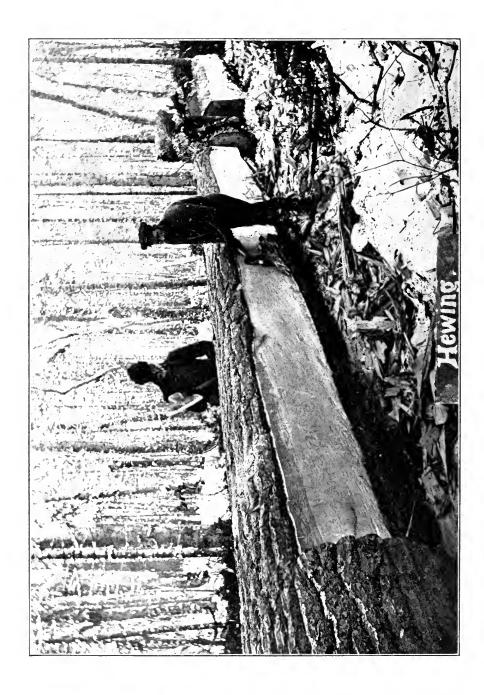
MAKING SQUARE TIMBER.

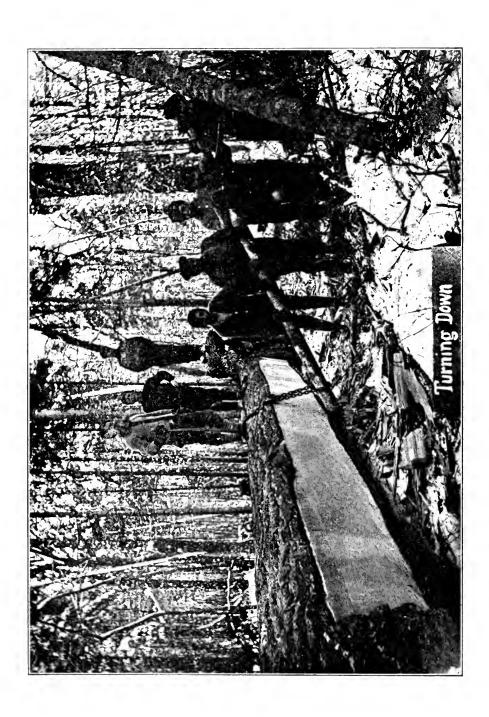
Illustrations from photographs by W. D. Watt, North Bay.

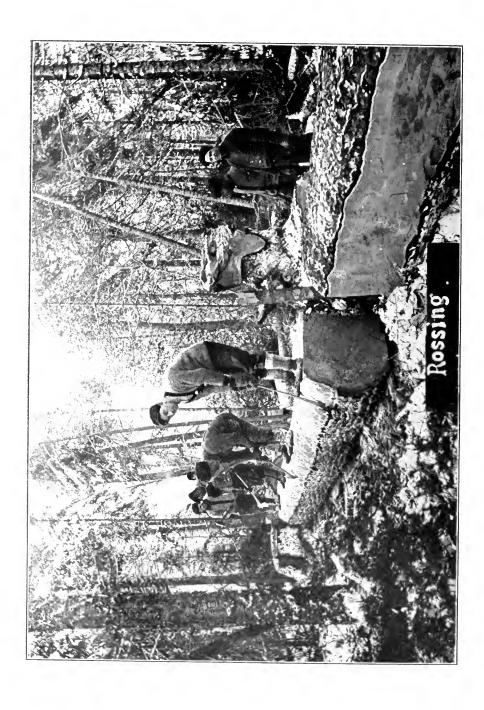


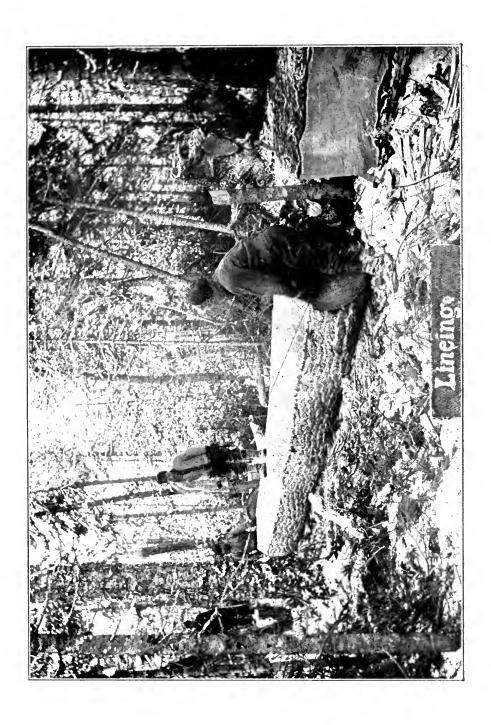


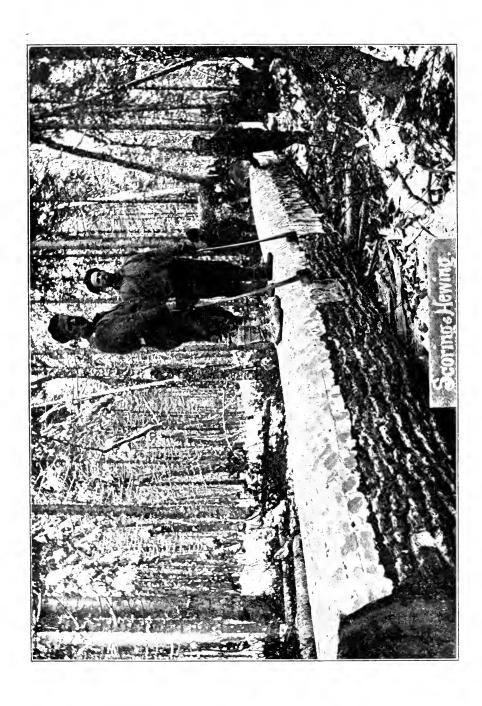


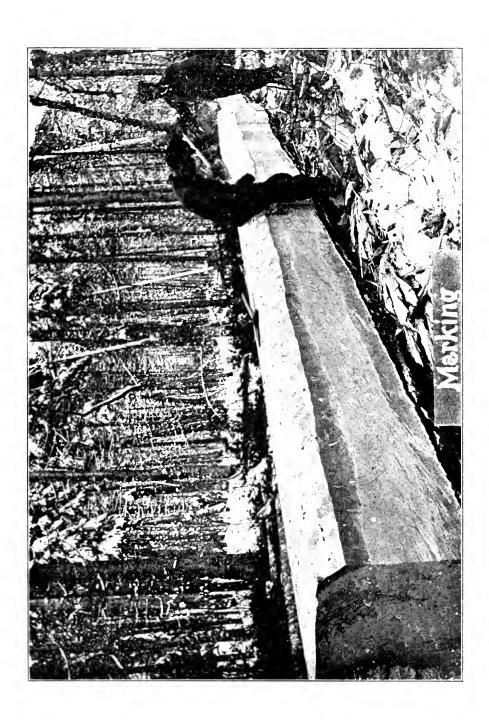


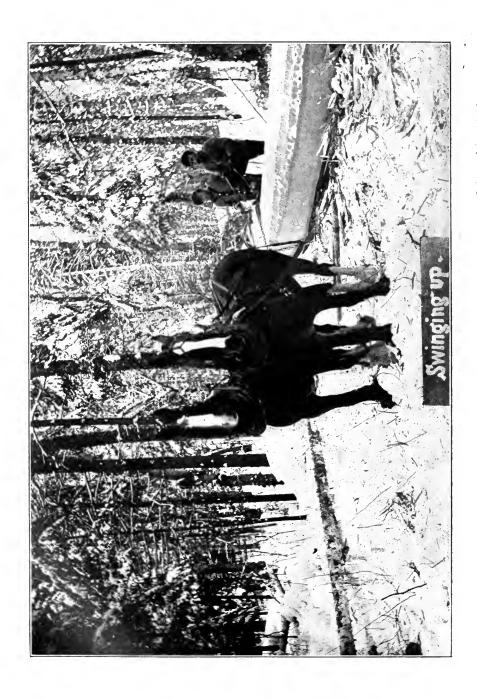


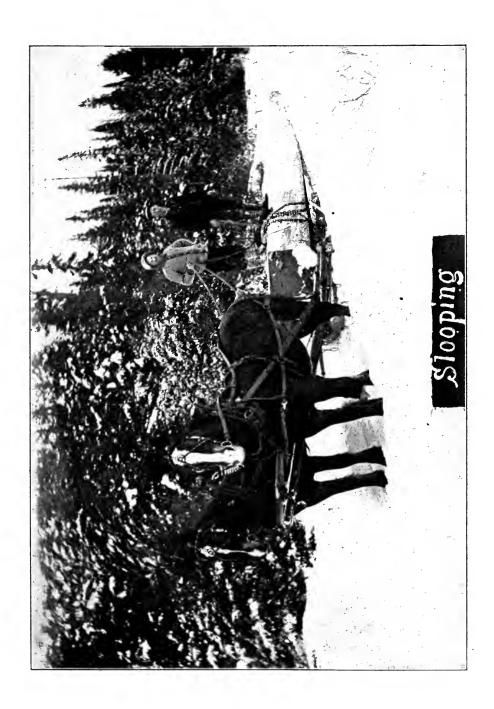


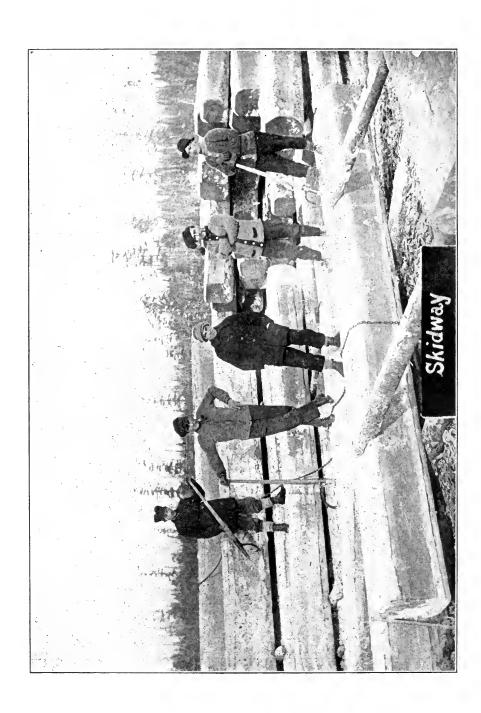


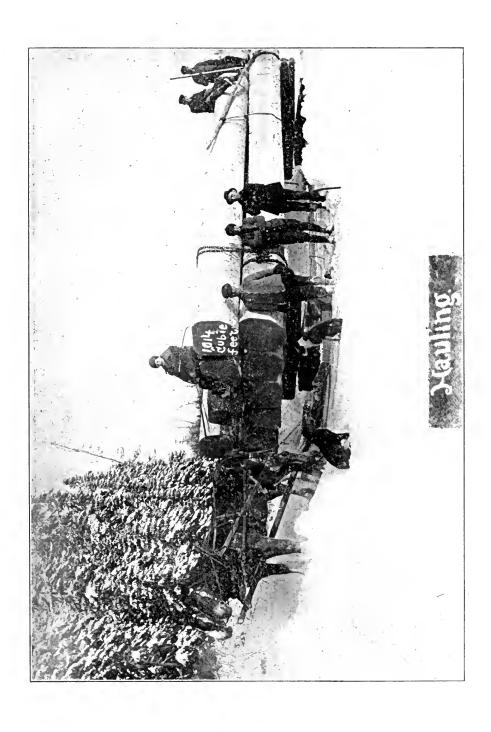


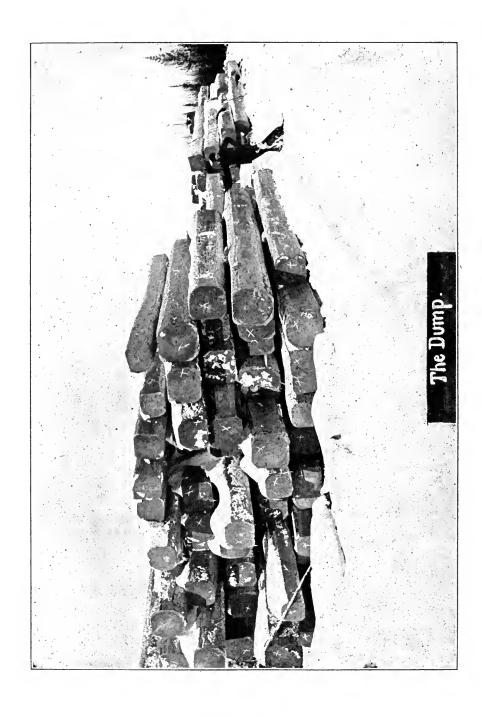


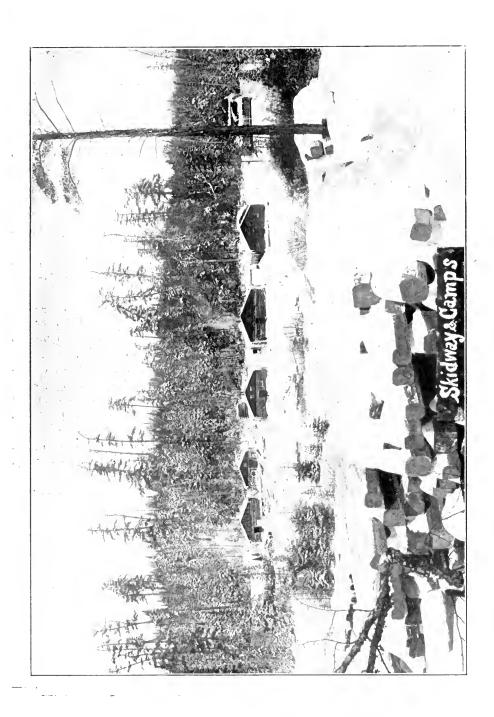












Appendix No. 41.

REPORT ON THE CONSTRUCTION OF ROADS IN NORTHERN ONTARIO.

(Under the Provisions of 2 Geo. V., chap. 2.)

To the Honourable W. H. Hearst,

Minister of Lands, Forest and Mines.

SIR,—I have the honor to submit a general report of the work done in the construction of roads in Northern Ontario for the season of 1913, in conformity with the Provisions of the Act 2 Geo. V., chap. 2.

Attached to this report is a description of the different works performed.

The season's work commenced in the latter part of April, except in a few instances where it was found profitable to construct bridges, and take out timber for crosslaying during the winter season.

The season was found very favorable for road construction, and considerable progress has been made. The operations extended from the Quebec boundary on the east to the Rainy River Valley and Keewatin on the west.

During the season, 764 miles of road were constructed or partly constructed and improved. Of the total mileage, 500 miles were graded, part of the graded road being macadamized or re-surfaced; 279 miles of the total were cut out of the virgin forest.

A good deal of the work of the season of 1912 consisted in cutting out new roads, which, however, owing to the wet season it was found impossible to burn off. In 1913 all of these roads have been burnt off and many of them graded and ditched. Several of the roads cut out this season, although burnt off and suitable for winter traffic, have not yet been graded.

The sum of \$1,081,172.28 has been expended during the past year, up to the 31st of October, on the operations, thus making a total expenditure out of the \$5,000,000 loan of \$1,274,255.08.

As the operations extended over a very large area it was necessary to purchase a good deal of machinery and camp outfit to carry on the work. This machinery has been well cared for, and will serve for a good many years.

In the older sections the trunk roads as constructed were carefully selected where they could be made most permanent at the least cost; and where they would serve the greatest number of people, taking into consideration the newer sections which would be opened up later on. The old roads often followed the ridges or high land and were in many instances found crooked and unsatisfactory as to grades or drainage. These were straightened out, the grades modified, and special attention given to drainage; old culverts were replaced with more permanent ones; the materials used consisting of stone, corrugated iron pipe or durable wood where it could be procured. Swampy or low lands were well drained, corduroyed in places, and re-surfaced with gravel or stone. Many of the old bridges had to be renewed.

In the district of Temiskaming along the line of the Temiskaming and Northern Ontario Railway and its branches, and along the Grand Trunk Pacific Railway, east and west from the Town of Cochrane, it was found necessary, besides constructing trunk roads along the boundaries of townships and through

the centres, to construct a good many short roads in the interior of the townships, in order to give settlers who had located on their lands, and were making substantial clearings, an outlet to these trunk roads. This also was found necessary, inasmuch as there were few settlers, children had to walk long distances in order to reach a school, and many miles of road had to be made for that purpose.

I am glad to be able to report that the work of the season of 1912 appears to have given very much encouragement to the incoming settlers, and this last year has witnessed more bona fide work on the land by the settlers than I have previously observed for many years. I refer more particularly to the country in the vicinity of the town of Cochrane and along the line of the Temiskaming and Northern Ontario Railway from Cochrane south to Englehart and Earlton, and along the Charlton branch to Charlton. Large clearings with good substantial farm buildings are to be met with almost everywhere.

Along the roads constructed in 1912 most of the lots have been settled upon and small clearings made, and I have every reason to believe that if the work, as it is now being carried on, is continued for a few years there will be found in the Claybelt along the Temiskaming and Northern Ontario Railway and Grand Trunk Pacific Railway settlements as prosperous as are to be found in the district of Rainy River, or in the country in the vicinity of Haileybury and New Liskeard.

From my experience during the last two seasons in the construction of roads north of Englehart and over the height of land, I am the more fully confirmed in my opinion, and have not the smallest doubt of a successful future from an agricultural standpoint, for that district, provided that, as at present, settlement for the next few years is confined as far as practicable, to the most promising areas, so as to ensure large clearings whereby the climatic conditions may be improved. Little or no difficulty was met with in draining all the roads in the Claybelt which were graded and ditched last season. Much difficulty, however, is found in making permanent roads, for want of gravel or stone, which is seldom met with in that district.

In the valley of the Rainy River, which comprises an area of about three-quarters of a million acres of good agricultural land, I have found that sections are still unoccupied; and in other sections, during the last fifteen years the development which might have been expected has not taken place, owing in some measure to the want of roads. The continuation, however, for a year or two of the work commenced in 1913 will remove this difficulty, and I am confident that settlers will go into this district in the future in greatly increased numbers, as the land is nearly all of good quality.

On my first visit to the Rainy River Valley, over twenty years ago, I found the conditions there almost similar to those in the Claybelt to-day. The character of the country, its soil, and its climatic conditions are almost identical. It is in the same latitude, and to-day in the Rainy River Valley where settlement has taken place, and large clearings made, all kinds of grains and vegetables are produced in abundance. Summer frosts are almost of the past.

In the districts of Nipissing, Sudbury, Algoma, Thunder Bay, and Kenora, the trunk roads as constructed or improved will make it possible for the settlers to reach markets for their produce at all seasons of the year. Other roads are required in these districts to make it possible for the settlers in the out-lying sections to reach the main trunk roads. Several of the trunk roads as graded last season still require to be surfaced in places with gravel or stone. It was found impossible in one season to complete many of the roads.

The mining roads constructed into the Kirkland Lake Goldfields and the West Shining Tree Goldfields will give to the miners in those sections an opportunity of developing the several mining prospects opened up; the road from Iroquois Falls Junction on the Temiskaming and Northern Ontario Railway to the pulp mills at Abitibi River will give to the settlers in that vicinity an opportunity of hauling their pulp timber and other produce to the mills.

Fair progress has been made by the settlers in the vicinity of Cochrane both east and west therefrom. Already settlement has reached a point about nine miles north of the Grand Trunk Pacific Railway in the valleys of the Abitibi and Frederickhouse Rivers. Quite a settlement has taken place in the vicinity of Hearst at the junction of the Algoma Central and the Grand Trunk Pacific Railways, not only on the lands of the Crown but on the railway lands of the Algoma Central Company. Twenty-nine miles of road were cut out and part graded in this section.

Work was commenced at Ground Hog River on the Grand Trunk Pacific Railway 50 miles west of Cochrane. A few miles of trunk road were cut out along the railway, where a considerable settlement has already been made. This is one of the most promising areas in the Claybelt. At this point there is a large section of country which was burnt years ago and is now easily cleared. Vegetables of all kinds have matured here at the headquarters of the railway contractors.

Trunk roads have been constructed west of Cochrane as far as the township of Kendrey, the lands of the New Ontario Development Company on the Matagami River. This company is making good progress. Approximately 400 acres have been chopped and burnt over, of which 300 acres have been logged and fairly well drained. The following plant and machinery has been installed: A large saw mill with a capacity of 60,000 ft. B.M. per day, six rossing machines with a capacity of 50 cords of pulp wood per day and a first-class planing mill.

Sixteen private dwelling-houses have been erected for employees and settlers and two large boarding-houses with accommodation for 100 men. A general store has also been built, together with a post-office and a schoolhouse, the latter being used also as a church. Upwards of ten miles of a fairly good type of colonization roads have been constructed by the company.

In the descriptions of the several roads hereinafter given, information will be found respecting the operations in the various districts.

Accompanying the report is a statement of expenditure in the different districts and of the number of miles of road constructed or under construction.

I have the honor to be,

Sir,

Your obedient servant,

J. F. WHITSON.

Road Commissioner.

2 Geo. V. Chap. 2.

STATEMENT OF EXPENDITURE ON ROAD CONSTRUCTION, AND MILEAGE CONSTRUCTED,

FROM 23RD MAY, 1912, TO 31ST OCTOBER, 1913.

1912.

1913.

Total number of miles of new road cut out in 1912	210 miles	New and old roads graded in 1913	500	miles
(Of which were graded, 39 miles.)		New and old roads partially graded	40	miles
Old road improved	23 miles	New bush roads cut out ready		
		for grading and old roads		
Total number of miles of road		improved	224	miles
under construction, 1912	233 miles			
		Total number of miles of road		

under construction, 1913... 764 miles

In 1912 the total expenditure was along the Temiskaming and Northern Ontario Railway and branches; and along the Grand Trunk Pacific Railway, in the Districts of Temiskaming and Sudbury.

In 1913 the work was spread over all Northern Ontario, from the Quebec Boundary to the Manitoba Boundary; in the Districts of Nipissing, Temiskaming, Sudbury, Algoma, Thunder Bay, Kenora and Rainy River.

District.	ture to 31st	Expenditure to 31st Oct., 1913.	Mileage constructed and under construc- tion 1913.	Number of miles of bush road cut out.
District of Nipissing, North Bay to Mattawa		83,313 38	48	4
District of Temiskaming, Haileybury to Englehart, Matheson, Charlton, Swas- tika District of Temiskaming, Cochrane,		185,612 61	150	50
Porcupine, Iroquois Falls & Trans. Ry. from Quebec Boundary west 125 miles to Ground Hog	182,523 93	230,704 37	190	138
District of Sudbury, vicinity of the Town of Sudbury and West Shining Tree Mining District		118,568 32	721	19
along G. T. P. Ry. and Junction of Algoma Central District of Algoma, between Blind River	3,866 71	18,529 61	29	29
and Sault Ste. Marie, on Sudbury & Sault Ste. Marie Rd.		76,275 40	35	
Thunder Bay, tributary to Port Arthur and Fort William		123,247 31	107	4
& Keewatin & N. W		95,533 58	$23\frac{1}{2}$	12
District of Rainy River, in Rainy River Valley	1		109	23
	\$193,082 80	\$1,081,172 28	764	279

Summary of Expenditure:-

 1912
 \$193,082 80

 1913
 1,081,172 28

J. F. WHITSON,
Road Commissioner.

ARTHUR E. D. BRUCE, Secretary and Accountant.

ROADS IN RAINY RIVER VALLEY, DISTRICT OF RAINY RIVER, CONSTRUCTED IN 1913.

Number of miles of roads constructed or improved and regraded	109
Number of miles of ditches constructed	321/2
Number of miles of tap or offtake drains constructed	91/4
Number of miles of road resurfaced with gravel	30
Number of wooden culverts constructed	202
Number of pile bridges constructed	12
Amount expended during 1913	\$135,031 31



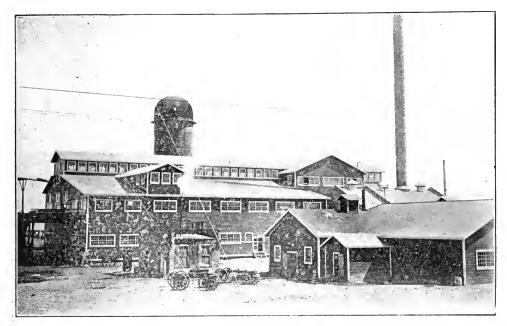
The beautiful banks of the Rainy River, west of Pinewood.

A trunk road was commenced at the town of Fort Frances opposite the site of the Hudson Bay Company's old post and continued westerly for 60 miles through the valley of Rainy River to near the town of Rainy River, where the Canadian Northern Railway crosses said river into the State of Minnesota, passing through the villages of Crozier, Lavalee, Devlin, Emo, Barwick, Stratton, Pinewood and Sleemen to Rainy River, crossing Indian Reserves Nos. 11, 12, and 13 at the Manitou and Long Sault Rapids. The road follows the best possible grades where it could be constructed at the least possible cost and at the same time where it would serve the greatest number of settlers.

The country passed through can be described in a general way as a first-class

agricultural section, the soil chiefly clay and clay loam, level or gently rolling with few rock outcrops. Here and there muskegs are met with or large tamarac swamps but all of them can with a reasonable amount of expenditure be drained and made good farm lands. Most of the valuable timber has in the last twenty-five years been cut off, either for railway ties, telegraph poles, piling or saw logs, in the townships within twelve miles of the Rainy River. Here and there an occasional farm is still well timbered, and in every instance there is sufficient timber left for fuel and for building purposes for the settlers for many years to come.

In 1897 and again in 1909 two very destructive fires swept over parts of the valley. The first fire crossed the river from Minnesota, near Stratton, and almost completely destroyed the timber on several townships in that locality. Later on, in 1909, a similar fire crossed the river from Beaudet and Spooner, on the American



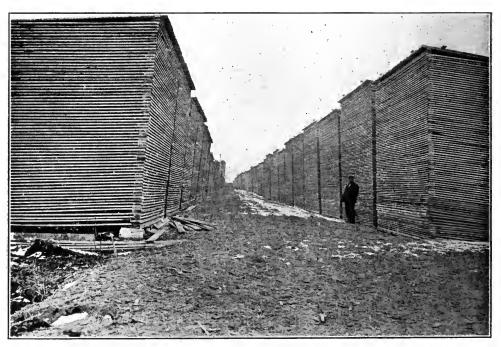
Shevelin & Clarke's Saw Mills at Fort Frances. Capacity, 750,000 feet per day.

side, entering Ontario at the town of Rainy River and swept in a northerly and north-easterly direction over a very large area. Much of the country swept over by these two fires was left in a condition almost ready for the plough. The deep muskegs, before these fires occurred gave to the country the appearance that it would never be suitable for agricultural purposes; these swamp lands, owing to the burning of the muskeg, have had an opportunity of draining, and are now some of the best farming lands in the valley. Almost every lot along the Trunk Road between Fort Frances and Rainy River has been located. Large clearings have been made in many instances and first class buildings constructed, the country has every appearance of being a prosperous agricultural settlement.

These remarks apply to the townships fronting on the river and adjacent to the line of the Canadian Northern Railway. About twelve miles inland, however, from the river, the conditions are somewhat different, owing, to some extent at least, to the want of good roads. Large clearings and well cultivated farms are not very frequently met with in this section. notwithstanding the fact that the land

is of a first-class quality. A continuation for a few years of the work commenced last season will remove all difficulties in the matter of roads, and I am confident that settlers will go into this district in the future in greatly increased numbers.

During last season a trunk road was constructed from Lavallee on the Main Trunk Road south to Rainy River, a distance of six miles. From the town of Emo a trunk road was constructed north a distance of five miles, and from the town of Barwick a Trunk Road was constructed north six miles. From Pinewood a road was constructed north four miles, and from Sleeman a main trunk road was constructed from the railway to the Little Grassy River, a distance of 163/4 miles. This last mentioned road opens up a large section of first-class farming country in which fair progress has been made by the settlers. Several short roads were constructed in different places throughout the valley, where the settlers were



Shevelin & Clarke's Lumber Yard, Fort Frances. Quantity, 100,000,000 feet in December, 1913.

in most need of an outlet. All of these north and south trunk roads when extended further north will open up new sections and give to the present settlers a means of reaching a market on the Canadian Northern Railway which they have been long in need of.

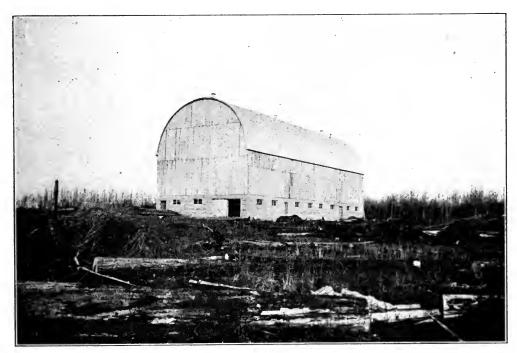
Nearly all these roads have been well graded and ditched; thirty miles have been surfaced with gravel, 202 substantial wooden culverts of cedar and tamarac have been constructed and twelve pile bridges of the most durable material built; 9½ miles of tap drains had to be constructed in order to get the water away from the roads; 32½ miles of road ditches were dug of sufficient size to not only drain the road bed, but to assist the settlers in draining their lands, old roads where they were found too narrow were widened and reditched.

Following is a description of the various roads, on which was expended \$135,031.31.

DESCRIPTION OF ROADS CONSTRUCTED.

ROAD BETWEEN FORT FRANCES AND RAINY RIVER.

Road between town of Fort Frances and the town of Rainy River, commencing at the western boundary of the town of Fort Frances in Section 30, township of McIrvine, thence westerly along the old River Road 1,640 feet. From here a new road was built, running west 6,575 feet to the east boundary of Section 24, Township of Crozier; thence south 900 feet to the north-east corner of Section 13, Crozier; thence west 3 miles on old road along the north boundary of sections 13, 14 and 15, thence north one mile to the north-east corner of section 21: thence west 7 miles to the north-east corner of section 20, Township



Mr. Crawford's New Barn, north of Emo, Township of Carpenter. Concrete foundation; length, 106 ft.

of Devlin; thence north one mile to the north-east corner of section 29, Township of Devlin; thence west 7 miles to the north-east corner of section 30, Township of Lash; thence south half a mile to the village of Emo. This road has all been graded and well ditched from Fort Frances to Emo. Between these towns, 31/2 miles of new road were cut out, graded and ditched. The remainder followed the old road which in many places was so narrow that two teams could barely pass. These ditches had to be reconstructed.

Along this road twelve and a half miles of ditches and two and a half miles of tap drain were dug. Fifty-four culverts and a pile bridge sixty-one feet in length across the La Vallee River at La Vallee, were built. Seven and a quarter miles of this road were surfaced with gravel. The remainder of the gravelling was left to be completed after the freeze-up when the work could be done at less cost, as the roads in the fall were very wet and would cut up badly if heavy loads were drawn on them. Eleven miles of this road still requires in places gravel, to make a first class road between Fort Frances and Emo.

This road passes through a fine farming district, the soil being principally clay or clay loam with a few spruce swamps, all of the land has been taken up by settlers, most of whom have good buildings erected. One mile west of Fort Frances commences a swamp running along the trunk road a distance of two miles. This is the only large swamp passed over until within three and a half miles of Emo where the road again crosses a swamp for two miles. In both of these swamps there is good drainage.

The timber is small, practically all suitable for lumber having been cut or burnt off by the fires which have overrun the country. The timber found is mainly spruce, tamarac, poplar, birch and balm of gilead.



The Banks of the Rainy River between Emo and Barwick.

The next section of the trunk road is between Emo and the town of Rainy River, a distance of thirty-eight miles, described as follows:

Commencing at the Village of Emo, thence north-westerly to the east boundary of section 36 in the Township of Barwick, one mile; thence westerly along an old colonization road to east boundary of Indian Reserve number 11, one mile and 14 chains, thence almost in a direct line across the Indian Reserve through a beautiful farming country badly burnt over in places, a distance of three and a quarter miles to west boundary of said Indian Reserve, then N. 77, 20 W. 33.36 chains, then N. 65 49 W. 6.39 chains thence westerly along north boundary of river lot 38 31.09 chains thence westerly along the north boundary of section 31 Township of Barwick, one mile to Barwick Station on the Canadian Northern Railway and close to the village of Barwick, thence continuing westerly along south boundary of sections 1 and 2, Township of Shenston 2 miles, thence north

along east boundary of section 3, 2,871 feet to the southern limit of said railway, thence westerly along said railway 5 miles and 426 feet across Indian Reserves 12 and 13. Both these Indian Reserves have been almost entirely swept by the forest fire of 1897. The greater portion of Number 12 and the eastern and southern portions of number 13 is fine agricultural land. In the western portion there is a large muskeg which will require considerable draining. After crossing the Indian Reserve, the road then follows along the northern boundary of sections 12 and 11, township of Morley for one mile, 1,498 feet: thence northerly along east boundary of sections 15 and 22. 2 miles, passing through the town of Stratton and crossing the Canadian Northern Railway to the north side, half a mile north of the south-east angle of section 15. The road then turns west for five miles along the north boundary of sections 22, 21, 20, 19 and 18, thence



Surfacing a Semi-Muskeg Road with Gravel. Part of the Little Grassy River Road, Rainy River Valley.

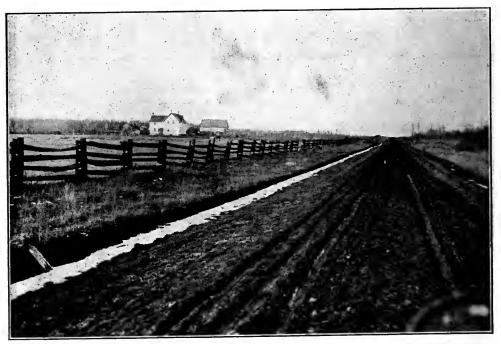
northerly 2,600 feet along east boundary of section 26, Township of Dilke thence westerly along old colonization road 5 miles, passing through the village of Pinewood: thence northerly 2,600 feet along east boundary of section 36, township of Worthington, thence westerly along the north boundary of the townships of Worthington and Atwood a distance of 9 miles to the town of Rainy River.

Along this road 16 miles of new road were cut out, 13 miles of which were graded, leaving 3 miles of new road to be graded next season, also 5 miles of old road should be graded next season before being gravelled. Sixty-two culverts and seven pile bridges were built, two and a quarter miles of tap drain were dug and seven miles of the road gravelled. Twenty-five miles of this road should

be gravelled to give a continuous gravelled road from Emo to Rainy River. The most of this gravel will have to be hauled by train as there are only a few good gravel pits close to this road. Twenty-five miles of this road was graded and three and a half miles cleared ready for grading, during the present season.

This road runs through a fine belt of clay land from Emo to Stratton. Between Stratton and Rainy River the road crosses six miles of swampy land, the remaining thirteen miles being good clay land. The high land has all been taken up and considerable of it cultivated.

Between Barwick and Stratton the road is all graded two miles of which were gravelled, the remainder being ready for gravelling. Between Stratton and Pinewood there remains one and one-half miles of new road to be ditched and two miles of old road to be graded before this road is ready for gravelling.



On the Fort Frances and Rainy River Trunk Road, near Stratton, before surfacing with gravel.

Between Pinewood and Sleeman there remains one and one-half miles of new road to be graded. Two and a half miles of gravelling will complete this road. Between Sleeman and Rainy River two miles of old road should be graded and four miles gravelled.

ROAD FROM SLEEMAN TO LITTLE GRASSY RIVER.

This road has a total length of sixteen and three-quarter miles, described as follows:

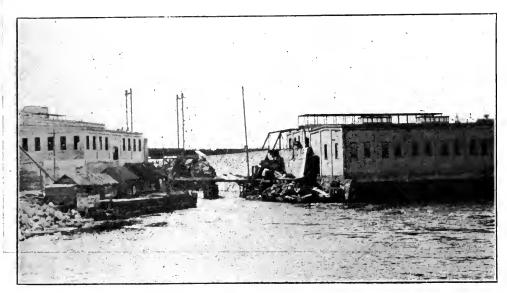
Commencing at the trunk road at the village of Sleeman thence northerly a distance of seven miles to the north-east corner of section 34 in the township of Blue thence diagonally across lots 5 and 6, Con. 1, township of Pratt to the north-east corner of lot 5, Con. 1, one mile and 1,109 feet, thence north 5 miles between lots 4 and 5 to the north boundary of the township of Pratt, thence

easterly one mile to the north-east corner of lot 3, township of Pratt, thence northerly two miles and 2,491 feet between lots 2 and 3, township of McCrossen to the bridge across the Little Grassy River.

On this road 17 miles of ditches and one mile and 600 feet of tap drain were dug, 32 culverts and two bridges were built, 10 miles of road gravelled and Sleeman's Creek cleaned out for one mile to give a good outlet to the water from the ditches. The road was graded its entire length. Four miles of this road is new road.

For the first twelve miles along this road fifty per cent. of the land is low, beyond the twelve miles the road passes through a fine belt of clay land where previous to the building of this road the settlers only had a winter road to the railway.

The large timber has nearly all been cut, but considerable cedar posts and poles are taken out each winter by the settlers. The principal timber found are the poplar, cedar, birch, tamarac and spruce. Most of these trees are of small size but there still remains a considerable quantity of good cedar and large poplar.



The Fort Frances Water Power on Rainy River, showing the Ontario and Minnesota Power Company's Power Houses and Pulp and Paper Mill on the Ontario side of the river.

ROAD IN THE TOWNSHIP OF DILKE.

One-half mile of road was graded and gravelled south from the trunk road between river lots 24 and 25. This road was built to enable us to haul gravel to the trunk road. It passes through a good farming district.

NORTH PINEWOOD ROAD IN THE TOWNSHIP OF NELLES.

This road is a continuation of the road running north from the village of Pinewood. Commencing at the north-east corner of section 3, township of Nelles, thence north four miles to the north-east corner of section 26, Nelles.

Along the east boundary of section 3 and 10 a single ditch was dug alongside of old road and the excavation spread to grade on the old road bed. On the east 10 L.M.

boundary of section 15, eighteen hundred feet of new road, one culvert and a pile bridge 46 feet in length were built. On the east boundary of section 22 one mile of new road was built. On the east boundary of section 27 ore mile of single ditch was dug and the road grubbed and cleared. On this mile another ditch should be dug on the opposite side of this road. The total length of this road is 4 miles and it was built with the intention of continuing it to the Big Grassy River country.

Land along this road is mostly swampy; all of the high land has been settled on, and the settlers have been very much handicapped by poor roads. This road will open up a good country to the north if continued. The timber found is small spruce, tamarac, poplar and birch.



A Group of School Children and Teacher in the Rainy River Valley.

BARWICK ROAD NORTH ALONG SHENSTON AND DOBIE TOWN LINE.

Commencing at the south-east corner of the township of Shenston, thence northerly 6 miles along the town line.

This road was graded its entire length. Five culverts and 1,095 feet of tap drain were built. This road passes through an excellent farming district, well settled.

ROAD ON NORTH BOUNDARY OF TOWNSHIP OF TAIT.

Commencing at the north-east corner of section 35, township of Tait, thence westerly along the north boundary of this township, two and one-quarter miles. This road has been cleared and grubbed but not graded.

ROAD IN TOWNSHIP OF SHENSTON.

Commencing at the south-east corner of section 2, township of Shenston, thence northerly a distance of 2,858 feet along east boundary of section 2. This

road was gravelled its entire length and one culvert built. It was made for hauling gravel to the trunk road. It passes through good farming country.

CARPENTER AND DOBIE TOWN LINE.

Commencing at the trunk road on the townline between Barwick and Lash, thence northerly 5 miles along the townline between Barwick and Lash and along the Carpenter and Dobie townline.

Along this road 3,310 feet of tap drain were dug, 17 culverts and one bridge 33 feet in length were built. The road was graded its entire length. This road passes through a good farming district. The soil is clay or clay loam. The land is all taken up and improved.

CROZIER AND DEVLIN TOWN LINE.

Commencing at the north-east corner of section 24 in the township of Devlin, thence northerly along the Crozier and Devlin townline one mile and a half.

The road was graded one mile north from the trunk road the remaining half mile being cleared and grubbed ready for grading. Two culverts and 600 feet of tap drain were built.

This is a new road and gives an outlet to a number of settlers who did not have a road before to town. The soil is a heavy clay. All of the land along this road is settled.

DEVLIN ROAD, TOWNSHIP OF BURRISS AND DANCE.

Commencing on road between lots 8 and 9, township of Burriss 2,400 feet south of the north boundary of Burriss, thence northerly 2,400 feet between said lots, thence northerly two miles between lots 8 and 9 township of Dance. There was also a road built running easterly along the north boundary of lots 8 and 7, Con. 6, Burriss one mile.

Between lots 8 and 9 Burriss, 2,400 feet of old road was grubbed and graded. Between lots 8 and 9 concessions 1 and 2 Dance, a new road was cleared two miles. In Con. 1 three-quarters of a mile of road was graded and the grubbing completed to the end of the mile. Six culverts and 3,080 feet of tap drain were built. Along the north boundary of lots 8 and 7 Burriss one mile of road was cleared 66 feet in width and 1,230 feet of road graded.

This road should be completely graded next season and the road continued north another two miles to give an outlet to the settlers located there.

The land is clay and spruce swamp and is all settled on and partly cleared and cultivated.

LA VALLEE ROAD.

Commencing at the Canadian Northern Railway track at the village of La Vallee thence southerly five and a half miles to the old river road thence easterly along said road a distance of three miles.

Six miles of this road was practically new road the remainder being old road which we regraded. This road has been graded its entire length, but the new road should be gone over next season with the grader to smooth it down as the grade was wet when built and it was impossible then to make a smooth road. 22 culverts and 9,700 feet of tap drain were built on this road.

This road passes through a fine belt of clay land and is all settled and considerable of it under cultivation. The timber found is small being chiefly spruce, tamarac, birch and poplar.

CROZIER ROAD.

Commencing at the trunk road on the east boundary of section 20, township of Crozier, thence south 1,000 feet to the Canadian Northern Railway.

This road was graded, one culvert repaired, and 300 feet of tap drain dug.

ROAD IN TOWNSHIP OF CROZIER.

Commencing at the trunk road at the north-east corner of section 21, town-ship of Crozier thence one mile easterly on the north boundary of section 22.

This road was cleared the full width of 66 feet. The country is swampy; the first quarter of a mile is good clay land.

ROADS CONSTRUCTED IN THE PORT ARTHUR DISTRICT, TRIBUTARY TO THE CITIES OF PORT ARTHUR AND FORT WILLIAM, DURING THE SEASON OF 1913.

Amount expended, \$123,247.31. Number of miles of road cut out and old roads improved and graded, 107.

The following roads were cut out, improved and graded during the season of 1913:

DAWSON ROAD.

Commencing at the north-westerly limit of the city of Port Arthur thence north-westerly 18 miles to the crossing by the Grand Trunk Pacific and the Canadian Pacific Railways near the Kaministiquia River.

DOG LAKE ROAD.

Commencing at a point on the Dawson Road about four miles west of the limit of the city of Port Arthur, thence northerly toward Dog Lake. Work was completed on this road four miles.

JOHN STREET ROAD.

Commencing at the westerly limit of Port Arthur, thence west to the Kaministiquia River a distance of 14½ miles. The last half mile of this road was not completed as the crossing point on the Kaministiquia River has not yet been decided upon.

OLIVER ROAD.

Commencing on the westerly limit of Port Arthur thence west 17 miles to the Kakabeka Falls, together with a diversion of 1½ miles to the dam across the same river.

OLIVER AND MCINTYRE TOWNSHIP ROAD.

Commencing at the Oliver Road and extending north between townships of Oliver and McIntyre 6 miles.

ARTHUR STREET ROAD.

Commencing at the west limit of the city of Fort William thence west to Kakabeka Falls, together with a branch road running south-westerly crossing the Kaministiquia River at the village of Stanley and proceeding south-westerly along the White Fish River Valley to Hymers, a distance of 21 miles in all. The work performed consisted in widening, clearing, grading and placing culverts.



On the Old Dawson Road, ten miles west of Port Arthur, showing 40 years' growth of White Birch.

PIGEON RIVER ROAD.

Commencing at the southerly limit of Fort William, thence south-westerly to and following the Slate River Valley, passing the front of the Prison Farm and southerly towards the International Boundary, at a point on the Pigeon River where a trunk road now being constructed in the State of Minnesota will also end. The work was performed on this road for a distance of 20 miles.

Scoble and Pearson Road.

Commencing at a point on the Pigeon River road where the latter turns south from the north limit of the township of Blake, thence west along the north limit of that township and south along the west limit of the said township, to a trunk road constructed by the municipality of Pearson township, and beginning again at a point on said trunk road where the line between lots 6 and 7 intersects it; thence south 2 miles; thence west 1 mile to another trunk road similarly constructed. Work was performed on these roads for a total distance of 6 miles.

On all the old roads improved, the stumps, etc., were cleared away and burned for a width of 66 feet, all boulders and stones, stumps and roots were removed from the central 40 feet, culverts of corrugated iron, stone or durable



The Fort William and Duluth Trunk Road passing the Provincial Government's Prison Farm, south-west of Fort William.

wood were built at all stream or water course crossings. The steep pitches and grades were modified by excavation. All low-lying portions of the roadway were built up by borrowing earth from the sides or from adjacent high ground. A roadway 28 feet in width having well constructed ditches on each margin was formed having a crown of 2 feet at its centre above the ditches. Graders hauled by horses and a large grader hauled by a traction engine were used in the work.

The old roads were often merely a waggon width track, closely hemmed in, in places by trees and undergrowth, with many roots, stumps and boulders in the roadways. They followed along the road allowances, but were very crooked and little or no work had been done to modify the steep pitches at stream crossings and hills. Drainage was insufficient, and in many instances the old ditches were so close to the travelled portion of the road that it was dangerous for vehicles to pass. These roads had to be widened, the old ditches filled in and new ones constructed. Gravel suitable for road purposes was difficult to procure.

DAWSON ROAD.

The work was begun at the west limit of the city of Port Arthur. The road was cleared to the full width of 66 feet for the first ten miles then 40 feet in width the remaining 7½ miles to the Canadian Pacific Railway near the Kaministiquia River. All stumps, stones and debris were cleared from off the central 40 feet of the right of way. Wooden, stone and four corrugated iron culverts were built in place. The grading was completed for $11\frac{1}{2}$ miles.

OLIVER ROAD.

Cleared 66 feet in width for 17 miles to the falls, also a branch running to the dam site on the Kaministiquia River about $1\frac{1}{2}$ miles. Stones, stumps, etc., removed from the central 40 feet. Wooden, stone and 45 corrugated iron culverts built in place. The grading and ditching completed for 18 miles.

OLIVER AND MCINTYRE TOWN LINE.

Cleared 66 feet in width for 6 miles, and stones, stumps, etc., removed from the central 40 ft. Wooden and stone culverts built in place. Grading begun at John Street and completed south one mile, also begun at Dawson Road and completed south 2 miles. All ditching completed. Part of this road still requires to be graded.

ARTHUR STREET ROAD.

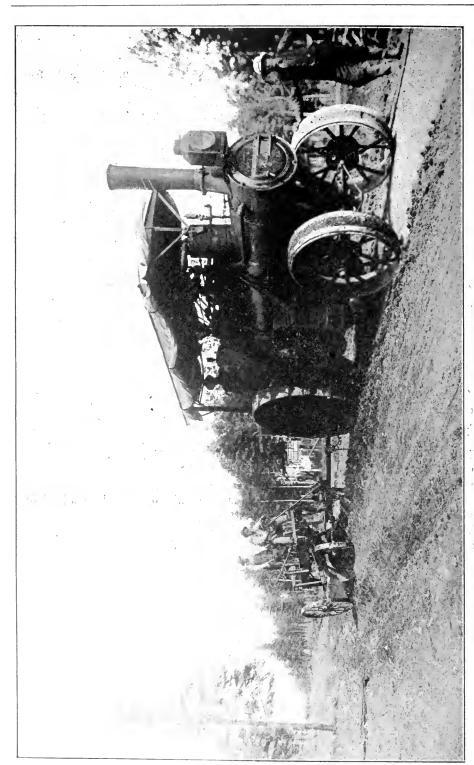
Cleared 66 feet in width for 21 miles; stones, stumps, etc., removed from the central 40 feet, and wooden, stone and 18 corrugated iron culverts built in place. Grading completed to Kakabeka Falls and on the branch road across the Kaministiquia River at Stanley and south-westerly $2\frac{1}{2}$ miles. $18\frac{1}{2}$ miles of grading done. The entire road well ditched. A diversion of $2\frac{1}{2}$ miles long from the former road south-west of Stanley was begun where grading ceased. This $2\frac{1}{2}$ miles was cleared out, stumped, etc., and made fit for a winter road. The diversion was made in order to avoid a steep hill on the old road. This joins the former road again and follows the same for about $1\frac{1}{2}$ miles. There a further diversion required to be made to a point on the former road near Hymers, thence it should run through the township of O'Connor.

PIGEON RIVER ROAD.

Cleared 66 feet in width for 20 miles, stones, stumps, etc., removed from the central 40 feet. Wooden, stone and 96 corrugated iron culverts built in place. Grading completed for 14 miles with the exception of 2 hill cuttings and one fill to be completed. Ditching completed for 14 miles. This road may be extended to the International boundary to connect with the state road from Duluth to the Pigeon River, which is now partially completed from Duluth to within a mile or two of the river.

SCOBLE AND PEARSON ROAD.

Cleared 66 feet in width for 4 miles, stones, stumps, etc., removed from the central 40 feet, and stone and 41 corrugated iron culverts built in place. Grading completed for 4 miles with the exception of a fill 300 feet in length which has been cross-laid. This part of the road lies on the town line between



Grading on the Oliver Road, west of Port Arthur.

the township of Blake and Paipoonge one mile, and between the townships of Blake and Scoble three miles, connecting at its southerly end with a trunk road already constructed by the township of Pearson. Road between lots 6 and 7 township of Pearson cleared 66 feet in width for two miles, stones, stumps, etc., removed from central 40 feet. Wooden culverts and bridge over the Slate River built. Road made fit for winter travel. This part of the road begins at the above mentioned trunk road and runs south 2 miles thence west 1 mile to join a second trunk road constructed by the municipality. This road may be extended south along the line between lots 6 and 7 to join the Port Arthur Duluth International road.

DOG LAKE ROAD.

Work begun late in season, at Dawson road. Cleared 40 feet in width for 4 miles. Stones, stumps, etc., removed from central 25 feet of clearing for 4 miles. Wooden and stone culverts built in place for 31/2 miles. Grading and ditching completed for 2½ miles. At a point about 2½ miles from the Dawson Road a diversion of the former road was begun and was laid out for 2½ miles when it again joined the former road. This was cleared and stumped and made fit for a winter road but was not graded nor completely ditched.

JOHN STREET ROAD.

Cleared 66 feet in width for 131/2 miles. Stones, stumps, etc., removed from central 40 feet of the clearing. Wooden, stone and 9 corrugated iron culverts built in place. Grading and ditching completed for 111/2 miles. Total length of road to the Kaministiquia River is about 141/2 miles. The last mile of which should not be built until such time as the crossing point of the river has been decided upon, the road to be diverted to meet that.

Along the Dawson Road which was cut out as far back as 1870 the land is nearly all settled on and in places large clearings have been made. In other places, however, many poorly-cultivated farms are to be seen or land held by land speculators. In other places, owing to the rough and broken character of the country, only small clearings or garden patches are under cultivation. This class of land is to be found towards the Kaministiquia River. The land in many places is light, gravelly and stony. There are a good many Finlanders located along the road who appear to be making good progress, although on rough, broken land.

The same remarks will apply to the character of the land along the Dog Lake Road; good land in small patches here and there, but speaking generally,

the country is rough and broken.

Along the John Street Road, Oliver Road and Arthur Street Road there are large areas of first class farming land under good cultivation. These lands have been settled on in places for many years.

Going south-west of Port Arthur in the Slate River Valley, you enter a fine farming country, under first class cultivation. Settlement as a whole will compare favorably with some of the best settlements in older Ontario. As you proceed south on the Pigeon River Road through the township of Blake and Crookes, the country becomes more broken and high mountains are passed, but in the valleys, however, the soil is first class, and after the completion of the road, it will all be occupied, as Fort. William and Port Arthur offer splendid markets for all kinds of vegetables.

The same remarks will apply to the country on the Pearson and Scoble Roads.

ROADS IN THE DISTRICT OF KENORA, IN THE VICINITY OF THE TOWNS OF KENORA AND KEEWATIN.

Number of miles of roads constructed or improved, 23½.

(Of which 4 miles were macadamized and 15 graded, and the balance, 4½ miles, cut out.)

Amount expended during the season of 1913, \$95,533.58.

Operations on the Kenora and Keewatin roads began early in May at the east branch of the Winnipeg River on the old road between the town of Kenora and the village of Keewatin, which road passes through the village of Norman. At a point on this road about half a mile east of the village of Keewatin a trunk road was constructed running north west, crossing Darlington Bay of the Lake of the Woods over the bridge constructed by the Colonization Road Branch of the Public Works Department in 1912. The road continues north-westerly, passing the north end of Middle Lake in the Township of Pellatt. thence continues in a westerly direction across the fourth concession of said township, crossing the west boundary of Pellatt about a quarter of a mile north of the southwest angle of Lot 16, Concession 5. The road then continues westerly and north-westerly for a distance of about 3¾ miles, passing along the east shore of Beulah Lake until it reaches the eastern end of Pelican Pouch Lake, where operations ceased; at a point about sixteen miles south-west of Malachi station on the Grand Trunk Pacific Railway and about the same distance east of the Manitoba boundary.

Besides this, a road was graded from Ignace Station to Osaquan Station on said railway, a distance of five miles. Beginning at Ignace, the first two miles of this road were through a muskeg, which had to be ditched and surfaced with cinders from the Canadian Pacific Railway round-house, to a depth of from eight to ten inches. Several culverts were put in and off-take ditches dug. The balance of the road was all cut out, stumped, and grading done where required. Several bad hills were cut down and graded, and 1,000 yards of corduroy laid, and covered with clay and gravel. Four small bridges were built of the following lengths, 100 feet, 6 feet, 15 feet and 40 feet. The traffic over this road is in connection with a stone quarry and a sawmill at Osaquan.

Besides the above road, one mile of road was cut out and fairly well graded at Minaki Station on the Grand Trunk Pacific Railway where it crosses the Winnipeg River, namely, Winnipeg Avenue and part of Front Street, Kenora Street and North Street. These roads connect Gun and Sandy Lakes with the Grand Trunk Pacific Railway Station. At the foot of Winnipeg Avenue on Sandy Lake, a dock eighty feet in length by sixteen feet in width was constructed.

Minaki is a town site laid out by the Department of Lands, Forests and Mines three years ago. Part of it has been disposed of, and it has now become a very prominent summer resort for the citizens of Winnipeg. Already the Grand Trunk Pacific Railway Company have commenced the construction of a large tourist hotel. Islands are numerous in the two lakes to the north and south of the railway, Sandy and Gun, and compare favorably with those of the Lake of the Woods.

The road as constructed between Kenora and Keewatin follows as closely as it was practicable to construct, the old road along the Canadian Pacific Railway, constructed nearly twenty years ago. The old road passed over a rough, broken and hilly country. From the east branch of the Winnipeg River west, very little work had been done on the road. No attempt had been made to cut down the grades or drain the low places. It was the most difficult and expensive piece of work I had

to construct this season, as rocky hills and steep pitches had to be cut down and the low places built up with rock. No gravel was available in the district and rock had to be crushed to surface the road with. The old road followed close to the bank of the Winnipeg River in places, or close to the right of way of the railway, where it was dangerous for teams to pass. Over 7,000 cubic yards of crushed rock was required on this road. The rock excavated from the hills was used in the road bed in the valleys.

The road between the two towns is now completed and will compare favorably with the best macadamized roads in any part of Northern Ontario. The distance from the east branch of the Winnipeg River on the Keewatin branch is 26-10 miles. At a point on this road about half a mile east of the Keewatin bridge, the trunk road branches to the north-west, crossing Darlington Bay on the long wooden bridge constructed last season by the Colonization Road Department. This bridge is over 600 ft. in length built on piles. From the Kenora and Keewatin Road to the bridge, a good portion of the road had to be built up with stone and surfaced with gravel, and crushed rock. North of the bridge through the Township of Pellatt the country was found very broken. The road winds through the valleys. In the rocky parts, road material, even soil was difficult to procure and had to be drawn a considerable distance. In other places, where the road passed through sections of good farming land, it was possible to use the grader. places follows a Colonization Road cut out two years ago. This road was straightened and where practicable was changed in order to improve the grades. now a well graded road for a distance of nearly nine miles beyond the Darlington Bay bridge. There still remains 5½ miles of this road to be graded.

The country to the north and north-west of the towns of Kenora and Keewatin, through which the above road passes and extending west to the Manitoba boundary, and north to the Grand Trunk Pacific Railway, is generally rugged, hilly and rocky, and in part mountainous. Not more than one-fifth of it can ever be considered as fit for cultivation of any kind. The arable land occurs in small tracts varying from a few acres up to a hundred acres, but seldom exceeding a few thousand acres in extent; comprising nowhere any important or extensive field for colonization.

The country has at different times, in places, been swept by forest fires. There still remain, however, very considerable areas of Jack Pine, Spruce and Tamarae with scattering groves of Red and White Pine. Where the land is free from stone or rock, and except in the Jack Pine plains where the soil is very sandy and gravelly, the soil is a rich clay or clay loam; and vegetables, and all kinds of grain are being produced, and as there are good markets at the towns of Kenora and Keewatin, farming where carried on is very profitable. the settler was seldom able to reach these markets except in the winter season when sleighing was good. With the road as now constructed, it will be possible for him to reach a market at all seasons of the year. Later on, this road, which is now within sixteen miles of the Grand Trunk Pacific Railway, might be extended, as all along the route, small scattered areas of fairly good land are met with. road might also be extended west to the Manitoba boundary, a distance of about sixteen miles, if it is ever found practicable for the Manitoba Government to construct a trunk road east from Winnipeg north of the Canadian Pacific Railway to the Lake of the Woods, one of the finest tourist resorts in the west.

DESCRIPTION OF TRUNK ROAD CONSTRUCTED BETWEEN TOWNS OF NORTH BAY AND MATTAWA, DISTRICT OF NIPISSING, DURING SEASON OF 1913.

Number of miles of road constructed and graded	48
Number of corrugated iron culverts placed	36
Number of miles of road resurfaced with gravel	20
Amount expended\$83,313.	38

This road commences at the Town of North Bay where Kennedy Avenue intersects the boundary between the Townships of Widdifield and Ferris; thence southerly along Kennedy Avenue and the southerly production thereof, close to the shore of Lake Nipissing to line between Concessions 14 and 15 of the Township of Ferris; thence in an easterly direction across Concession 14 to near the Grand Trunk Railway; thence southerly along the west side of the Grand Trunk Railway to the Village of Callander in the Township of Himsworth, a distance of seven and one-half miles; thence easterly between the 8th and 9th Concessions to the Township of Himsworth and Ferris to the side line between Lots 9 and 10, Ferris; thence southerly across the 8th and 7th Concessions of the said last mentioned township, to the road between Concessions 6 and 7; thence easterly across Lots 9 to 5 inclusive, crossing Canadian Pacific Railway on Lot 5; thence southerly and south-easterly along the north shore of Nasbonsing Lake, north of the right of way of the Canadian Pacific Railway, passing through Nasbonsing Station, and entering the Township of Bonfield, and crossing to the south of the Canadian Pacific Railway at the outlet of Nasbonsing Lake into the Town of Bonfield; thence northerly through said town to the line between Concessions 8 and 9, township of Bonfield; thence continuing easterly along said Concession line across Lots 10 to 32, inclusive; thence southerly between Lots 32 and 33, across Concessions 8 and 7, Township of Bonfield; thence easterly between Concessions 6 and 7, across Lots 33, 34 and 35, to the townline between Bonfield and Calvin; thence southerly along said townline across Concessions 8, 7 and 6, Township of Calvin; thence east between Concessions 5 and 6, in the said last named township, across Lots 36 to 33 inclusive; thence southerly between Lots 33 and 32, across Concession 5; thence easterly between Concessions 4 and 5, across Lots 32 to 1, inclusive, to the Township of Papineau; thence easterly crossing the right of way of the Canadian Pacific Railway on Lot 33, Concession 13, near Calvin Station; thence continuing in a north-easterly direction across the 13th and 14th Concessions of the said Township of Papineau to the line between Concessions 14 and 15 on Lot 22, north of Earl's Lake; thence continuing easterly along the line between Concessions 14 and 15 across Lots 22 and 21, and still continuing in an easterly direction across the 14th Concession, to the side road between Lots 15 and 16, where the road passes close to the right of way of the Canadian Pacific Railway; thence continuing easterly along the north side of the said railway to Mattawa Station, on the said railway, a distance of forty-eight miles.

Construction work on this road was begun early in May, 1913, from both ends. Commenceing at Mattawa, the road followed the old travelled colonization road, built many years ago, first for lumbering purposes and later on improved in places by the Public Works Department for colonization purposes. This road passes through a portion of the Township of Papineau, in which there is little or no agricultural land. The country is almost one continuous bed of boulders, small and large, with coarse gravel. The old road was in most places not more than 8 or 10 feet wide and in many places only the width of a waggon. I removed all the boulders from off the road for a width of from 18 to 22 feet and dug sufficient

ditches to carry off the surface water, and graded the road, cutting down all the bad hills and steep pitches and straightened the road from point to point. As good gravel was to be found in great quantities close to the road, the entire road was gravelled for a width of from 12 to 16 feet and to a depth of from 5 to 8 inches. Good stone culverts were placed wherever required.

As we entered the Township of Calvin on the east side fairly good agricultural land was met with, although stony in places. The country is all well settled and fair progress is being made. This road crosses the Pautois Creek on Lot 7 and the Amable du Fond River on Lot 21. There is a good concrete bridge across Pautois Creek but the bridge across the Amable du Fond River is a wooden one and has been in use for ten or more years and will shortly require to be removed. The covering is badly rotted and I re-planked it, and it will now last for a few years. The bridge is 120 feet in length. It is built on piers filled with rock. The piers are badly decayed and at present it would be unsafe to take heavy machinery over it. On Lot 26 a small bridge was constructed with two corrugated iron culverts 58 inches in diameter. The country along the road through the Township of Calvin is high and rolling. Large stone culverts were constructed where necessary and the road well graded and ditched. Several corrugated iron culverts were placed where stone could not be had conveniently. About three miles of the road was gravelled in places where it was most required. The road throughout this township is now in first class condition, from 18 to 22 feet in width. The low places were all built up with stone and the heavy grades cut down.

Entering the Township of Bonfield on the east, the land still continues good. The road crosses the Canadian Pacific Railway at the north-east angle of Lot 32, Concession 8, at the Village of Rutherglen to the north side, and again re-crosses to the south side on the same lot. On Lot 31 it crosses Spark's Creek where a concrete bridge was constructed by the Department of Public Works. Large corrugated iron culverts were used for the bridge on the creek crossing Lot 24, on the line between Concessions 8 and 9. Several small muskegs were crossed and these had to be filled in with stone and well drained. Numerous rocky hills were crossed and considerable rock cutting had to be done in order to make the grades passable. The country approaching Bonfield Station was exceptionally broken and required a great deal of work to make the road in good condition. On this part of the road corrugated iron culverts were placed on all the small streams. In the Town of Bonfield, across the Kabaskong River, a steel bridge with concrete abutments was constructed a year ago by the Public Works Department. The western approach to the bridge at the crossing of the Canadian Pacific Railway had not been filled in. Since October 31st I completed this part of the work, filling in over 1,500 cubic yards of rock.

After crossing the Kabaskong River, the road continues along the north side of the Canadian Pacific Railway, and at a distance of 2½ miles the Township of Ferris is entered, the road still continuing from a chain to a quarter of a mile from the right of way of the Canadian Pacific Railway, passing close to Nasbonsing Station on Lot 3, Concession 3, Ferris. The country still continues rocky and rolling although there is a fair percentage of fairly good agricultural land in places. The road crosses the Canadian Pacific Railway on the line between Concessions 6 and 7, on Lot 5, and follows the Concession road allowances and side road allowances throughout to the Village of Callander. From this crossing to Callander, forty stone and wooden culverts were constructed across the numerons small streams and runways. Throughout this entire township the country is

broken and rocky, although several first-class farms along the road were passed. Large numbers of boulders had to be drawn off the road and rocky ridges cut down. The road is now well graded and ditched although very little gravel was available, and later on it will be necessary to put gravel on the lower portions.

About three-quarters of a mile east of Callander the road crosses the Canadian Northern Railway and at Callander it crosses the Grand Trunk Railway to the west side and then continues northerly paralleling the railway until it reaches a point about a quarter of a mile south of Nipissing Junction, at the crossing of the Canadian Pacific Railway. Up to this point from Mattawa the road follows as nearly as possible the old road. It enters the Township of Himsworth half a mile east of Callander and continues across Concessions 27 and 28, Himsworth, when it again enters the Township of Ferris between Lots 31 and 32, and from that point it continues through the Township of Ferris until it crosses the boundary between Ferris and Widdifield on Lot 40, Concession 18. From near Nipissing Junction the new road was cut out, the old road being found almost impracticable owing to the rocky country passed through. The new road, as cut out, had no bad grades and passes through a country which has a fair percentage of agricultural land in it. It passes close to the shore of Lake Nipissing, passing close to a large number of summer resorts. From Nipissing Junction to North Bay the country is very level in places, the soil being light, sandy loam. No gravel was available and after the road had been well graded and ditched it was found necessary to crush rock so as to macadamize about four miles of it. This work was begun early in January when it was found cheapest to crush and haul rock. Between North Bay and Callander twenty first-class stone and wooden culverts were constructed and three wooden bridges.

This road was all constructed by day labor. The grader was used where it was found practicable but that covered only a very small portion of the entire road.

Eighty-three thousand three hundred and thirteen dollars and thirty-eight

cents was expended on this road.

When the road between North Bay and Callander is stoned and the low places between Callander and Bonfield gravelled and a new bridge constructed across the Amable du Fond River, this road will be quite passable for automobiles or motor trucks. At present, the distance of forty-eight miles can be made in three hours.

ROADS IN THE DISTRICT OF SUDBURY.

Number of miles constructed and old roads improved, 72½.

(Of which 10 miles have been macadamized and 50 miles graded, 12½ miles cut out and partly graded.)

Amount expended, \$118,568.32.

Work on the Sudbury roads was commenced on or about the 1st of May, 1913, between the Town of Sudbury and the Murray mine which is distant $3\frac{1}{2}$ miles west of Sudbury. A road had been constructed between these two points by the Colonization Road Branch some years ago. It passed through a very rocky and broken country, interspersed with several small muskegs which were difficult to drain. There was a good deal of traffic passing over this road between Murray mine and Sudbury, and also that of all the settlers in the Chelmsford Valley for twenty miles west, as far as Onaping on the west and north-west, Vermilion Lake on the south and Vermilion River on the north. It was therefore considered

necessary to construct a trunk road sufficient for the heavy traffic and farm produce that would be taken over it. The road was constructed as near as practicable to the stations along the Canadian Pacific Railway, through the Village at Murray mine, Azilda, as close to the Village of Chelmsford as possible, through the Village of Larchwood and west to Phelan.

Between Sudbury and a point a mile west of Murray Mine, the country is a series of rocky ridges and small muskegs. On the old road little had been done to modify the grades, and it was found necessary to do a great deal of rock cutting and filling in of the hollows in order to make a grade that was in keeping with the amount of traffic which would pass over the road. No gravel was available along the road.



The Sudbury and Murray Mine Stone Road.

A stone crusher was put to work along the road, also crushed rock was brought in by train from the Moose Mountain Mine, north of Sudbury. It required 5,000 tons of crushed rock to surface the road to a point about a mile beyond Murray Mine. Beyond this point the road passed through a section of country less broken, as far as Azilda Station on Lot 4, Concession 1. Township of Rayside, where the Chelmsford Valley, a large section of good agricultural country. is entered. The road then continues west and north-west within 5 to 15 chains of the right of way of the Canadian Pacific Railway to the line between Concessions 2 and 3, Lot 8, Rayside, thence west along said concession line across Lots 8, 9, 10 and 11, to the townline between the Townships of Ravside and Balfour; thence north 15 chains to the line between Concessions 2 and 3 of said Township of Balfour, thence west along the line between said Concessions to line tween Lots 10 and 11, 5 miles; thence north and north-west crossing the Canadian Pacific Railway near the line between Lots 11 and 12; thence westerly

north of the right of way of said railway, crossing the Vermilion River and passing through the Village of Larchwood on the townline between the Townships of Balfour and Dowling; and still continuing westerly to the line between Concessions 3 and 4, Township of Dowling, thence west along said Concession line, across Lots 2, 3, and 4, thence south between Lots 4 and 5 to the Canadian Pacific Railway, in all a distance of 21 miles from Sudbury.

From Azilda west and north, the land is in most instances clay or clay loam, and in places sandy loam, fairly level, with that class of land extending for miles to the north and south of the road. A large portion of the country is cleared and under cultivation. All the good agricultural land has been settled upon, and fair sized clearings made. In many instances large clearings, with first-class buildings, are met with throughout this valley.



Sudbury and Murray Mine Stone Road passing under the Algoma Eastern Railway.

Azilda Trunk Road:

From a point on the Sudbury and Murray Mine Road half a mile east of Azilda Station, a road was constructed north into the Blezard Valley between Lots 2 and 3. Township of Rayside, across Concessions 1 to 5, inclusive, a distance of 43/4 miles, to the line between Concessions 5 and 6, Township of Rayside: thence west between the said Concessions one mile, and east four miles to the line between Lots 7 and 8, Township of Blezard. This road was well ditched and graded. It passes through a first-class agricultural country; and gives to the settlers a good outlet to the markets at Murray Mine, Copper Cliff or Sudbury. It was intended to have extended this road further north for four miles to the Vermilion River, as the country still continues good and well settled. But owing to the lateness of the season, it was found impossible to continue the work.

From a point on the Sudbury and Murray Mine trunk road about one mile west of Murray Mine towards Larchwood on the trunk road, part of the road should be surfaced with stone or gravel. In places the soil is a heavy clay, and in the wet seasons it will be difficult for heavy traffic to pass over it. The road, however, has been well ditched and graded, the grades modified, the road widened and good substantial culverts constructed where required.

Sudbury and Blezard Valley Trunk Road:

From a point about two miles north of Sudbury, a trunk road was constructed northerly into the Blezard Valley, which is a continuation of the Chelmsford Valley above mentioned. The work began on the line between Lots 4 and 5. Concession



Sudbury, Murray Mines and Chelmsford Stone Road, between Sudbury and Murray Mines.

6, McKim, and continued northerly, passing the Stobic Mine, Mount Nickel Mine and Blezard Mine. For the first six miles, the road passes through a country which is broken in places, with rocky ridges which required a good deal of rock cutting and filling to improve the grades. Beyond that point, a fine agricultural country is entered. The road was completed for a distance of 9½ miles, terminating on the line between Concessions 1 and 2, between Lots 6 and 7, Township of Hanmer. Numerous culverts and small bridges had to be renewed on this road and deep drains constructed. The road is now in first class condition, but owing to the large amount of traffic which will pass over it from the settlement in the Valley, parts of it require to be surfaced with gravel or rock.

Froud Mine Road:

From a point on the Sudbury and Blezard Valley trunk road about two miles north of the Town of Sudbury, a road to the Froud Mine having a length of 11/2 11 L.M.

miles was constructed. This road passes through a rough, rocky section; the rocky hills had to be cut down and the valleys filled; it was also found necessary, owing to the great amount of traffic that passes over this road, to re-surface it with stone. Rock was crushed near the Froud Mine and placed on the road. It is now a first class macadam road, well drained.

Garson Mine Trunk Road.

Commencing at a point on the Sudbury and Brezard Valley Trunk Road, about two miles north of the town of Sudbury and extending to the Garson Mine in the township of Garson, through the townships of McKim, Neelon and Garson (distant 8½ miles) 4¼ miles of old road were regraded and ditched, and ½ mile macadamized and 4¼ miles of new road was graded and macadamized. The new road passes through a light sandy country, where it was found impassable



Bridge, 325 ft. long, over the Opickinimika River, Mile 13, West Shining Tree Road.

for heavy traffic without resurfacing with stone. Crushed rock was secured at the Moose Mountain Mine on the Canadian Northern Railway, and landed at the point on the road where it crosses the railway, at a cost of 75c. per ton; also rock from the waste dumps at the Garson Mine, where no charge was made. Over 5,000 tons of rock was used on this road. The balance of the road was high, and is now well graded and ditched. Several small bridges were constructed and corrugated iron culverts were placed on the small streams, the westerly five miles of this road passes through a fairly good agricultural country, the latter portion through a light sandy section.

West Shining Tree Mining Road.

Commencing at a point on the Canadian Northern Railway at mileage 78½ north of the town of Sudbury, on the east shore of Duchabaning Lake, thence northerly, passing the north end of Deschenes Lake, and north-easterly through

townships of Garvey, Garibaldi, part of Miramichi and Asquith, to the southeast end of West Shining Tree Lake,, a distance of nineteen miles. This road was cut out 40 feet in width through a virgin forest of jack pine, spruce, white birch and poplar, and a few scattering groves of red and white pine. The road crosses the Opickinimika River about thirteen miles north-east of the railway. The road to this point has been nearly all well graded and cross-layed in places, several culverts have been built, and at the Opickinimika River a first class wooden bridge has been constructed, 325 feet long, built on piers filled with rock. A bridge was also built across the Papoose Creek, about a mile east of Opickinimika, having a length of 196 feet, also one across Temple Creek 50 feet long. This work was done since the 31st October. East of the river the road has been well cut out and well graded and is a first class winter road and suitable for light summer traffic.

The road passes through a country generally rolling with sand or gravel ridges, along which the road followed. Several of the sand ridges had to be cut down but little or no rock was met with on the road. There are very few heavy grades and this road is now in the condition for traffic. The road is almost completed to the gold mines now being operated.

From the end of the road at Shining Tree Lake there is a winter road cut out by the miners so as to enable them to take in supplies during the winter season. This road, however, is not fit for summer traffic.

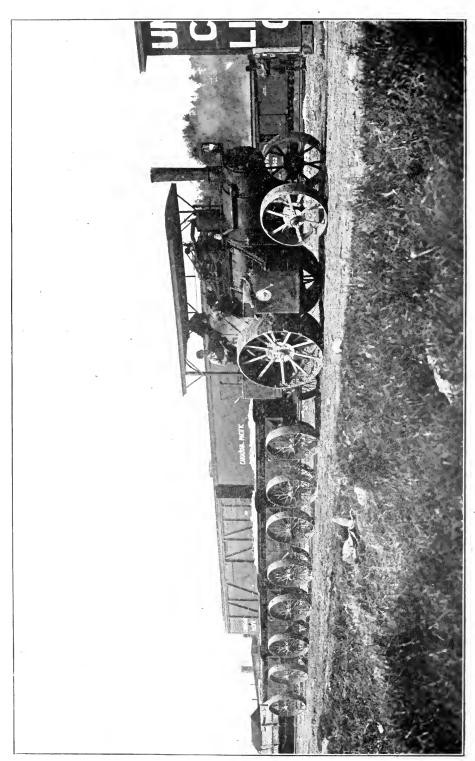
This road, besides serving the requirements of the mining community, will be a useful road later on when timber operations are being carried on in this district in the future, as it opens up a section of the country in which there was no communication by way of roads.

SAULT STE. MARIE AND SUDBURY TRUNK ROAD.

This road commences at the eastern limit of the town of Sault Ste. Marie and runs in an easterly and southerly direction to Echo Bay (Ekoba), a distance of fifteen miles; thence easterly a further distance of ten miles, to the village of McLennan, thence continuing easterly a further distance of 5½ miles to the village of Desbarats, thence easterly two miles to Portlock, thence easterly six miles to Bruce Mines, thence easterly nine miles to Thessalon; thence easterly to Blind River, distant eighty-three miles from Sault Ste. Marie.

Of the distance between these two points, thirty-five miles of road was ditched and graded, of which ten miles has been macadamized and 3/4 of a mile surfaced with rocmac and thirteen miles surfaced with gravel.

This road, after leaving the town of Sault Ste. Marie, passes through the Garden River Indian Reserve, the townships of Tarbutt and Tarbutt Additional, Johnson, Plummer and Plummer Additional, Lefroy, Thessalon, Bright and Bright Additional, Thompson and part of Cobden, past the villages of Garden River. Echo Bay, Bar River, Desbarats, Portlock, Bruce Mines, Thessalon and Blind River. It follows in most instances the old colonization roads constructed at different times. The road is well selected where it would serve the greatest number of people, taking into consideration the character of the country to be passed through. It passes



Loading Crushed Rock at Echo Bay for the Sudbury and Sault Ste. Marie Trunk Road.

through a country in which there is a fair percentage of good agricultural land, under cultivation. In places the country is broken and rocky. Tributary to this road on the north are to be found areas of good land well cultivated. Large clearings and fine buildings are to be met with everywhere.

Owing to the unsatisfactory condition of the roads heretofore, it has been difficult and at periods almost impossible for the settlers to reach good markets at Sault Ste. Marie or other smaller towns along the railway. The road as now constructed will allow the settlers as far as Blind River, about eighty miles east of Sault Ste. Marie, to reach that point. It will also give them access to all the stations along the Canadian Pacific Railway.

Part of the road only has been surfaced with gravel or stone and it will take another season to finish the road to Blind River. Several culverts and small bridges are required to be built. The work as performed this season covered the worst parts of the road, thirty-five miles out of the eighty. The following is a general description of the work done:—

Commencing at the eastern limit of the town of Sault Ste. Marie and running east, the road was well graded and ditched for eleven miles. The first ¾ of a mile, after being macadamized, was surfaced with rocmae 12 feet wide. The next ¾ of a mile was covered with three course macadam 12 feet wide. This mile and a half of the road had a very bad sub-grade and it was necessary to make the stone from ten to twelve inches deep, consolidated. The balance of this section up to mileage 5½ was covered with two course stone.

Section two extended from Garden River to Echo Bay. The work done in this connection consisted of raising, widening, riprapping and railing Echo Bay fill, the North Channel fill and the Root River fill. Gravel put down on this road during the winter of 1912 was found insufficient. It was raked and rolled and the whole section regraded and widened and resurfaced with one course of limestone. A gap is thus left unsurfaced of nearly a mile between Root River at mileage 5½ and mileage 6½. Eight miles of road were under construction.

Section No. 3.—The work done in this section consisted of grading and draining between mileage 15. Echo Bay, and mileage 20½, a large amount of riprapping was necessary as a considerable portion of this section of the road had been badly washed out, the ditches having been deepened and widened by freshets so that it was dangerous for teams to pass owing to the narrow road bed. A new right-of-way was required for a distance of ¾ of a mile. This was purchased from the adjoining land owners and a new road constructed. This section was also gravelled with the exception of 2¾ miles, which was left to be gravelled during the winter season on account of the long haul. This work has been completed since the close of the fiscal year. Ten Corrugated Iron Culverts were placed in this section.

Section No. 4.—This camp built and graded the section between Nestorville, Mile 44½ and Mile 49¾, a distance of five and a half miles. Gravel was also placed between mile 44¼ and mile 48; the remainder being left unsurfaced on account of there being no material available without too long a summer haul. This work followed in the main an already existing road, which, however, was little more than a trail. The construction was practically new. On this section twenty-one metal culverts were placed.

Section No. 5.—This camp built, graded, drained and gravelled three miles of a road immediately east of Portlock, between mile 34½ and mile 37½. As in Section 4 this road was already in existence as a mere trail. A considerable amount

of rock work was necessary as there were a number of abrupt rocky ridges. This work comprised the westerly half of the Portlock—Bruce Mines Section; the remainder being in quite good condition and requiring only permanent culverts, some of which are in place ready to be installed in the spring. The number of metal culverts placed in this section was eighteen. It was intended also that this camp should put in permanent culverts between Desbarats and McLennan, which road was, with this exception, in fairly good condition. There was not time to do this on account of the lateness of the season and the culverts are stored at the village of Desbarats, to be installed during the coming season.

Section No. 6.—This camp built 4½ miles of road along the Mississaga River west of the town of Blind River, from mile 78¼ to mile 83. The work followed the lines of an existing road in the main, but is practically new construction throughout. For almost the entire distance the right-of-way had to be cleared and straightened. In several places as well a considerable amount of filling had to be done as the previous road was impassable for several weeks during the year, at high water of the Mississaga River. On this stretch of road twenty-one metal

culverts were placed.

Besides the above mentioned roads, the following works were constructed:

A reinforced concrete culvert 6 x 6, one and one half miles east of Portlock and two reinforced concrete bridges near Portlock, one 16 ft. and the other 30 ft. span. A reinforced concrete bridge over Anderson Creek, between McLennan and Desbarats was also built and the road straightened at this point. This involved diverting Anderson Creek and a considerable fill, stone being for the base.

Culverts used in this work were for the most part corrugated iron pipe, finished where necessary with concrete ends. The road between Sault Ste. Marie and Thessalon is now in first class condition with the exception of about $\frac{7}{8}$ of a mile east of Root River, which requires to be resurfaced with stone.

PART OF THE DISTRICT OF ALGOMA, ROADS IN THE VICINITY OF THE TOWN OF HEARST.

Amount Expended	\$18,529	61
Number of miles of bush line cut out		29
Number of miles of road graded or partially graded		7

DESCRIPTION OF ROADS CONSTRUCTED.

Road No. 1.—Townships of Way and Hanlan:

Situate along the north side of the right-of-way of the National Transcontinental Railway.

Commencing at the east boundary of the township of Way, near the junction of the Algoma Central and Hudson Bay Railway, and extending westerly along the north side of the National Transcontinental Railway a distance of 5½ miles to the side road between Lots 18 and 19, township of Hanlan. This road was cut out the full 66 feet; 2.2 miles of the road was well grubbed and the timber burned. One mile of cross-lay was laid and well ditched and graded. The balance of the road, 3.3 miles is still to be burned and grubbed.

Road No. 2 .- Township of Kendall and Way:

Situate between townships of Kendall and Way across Concessions 7, 8, 9, 10, 11 and 12 and part of Concession 1, township of Casgrain, 4.3 miles. Road cut the full width and grubbed 32 ft. and burned, with the exception of about one quarter of a mile on Concession 7 on the Transcontinental Railway, south to the Mattawashquia River about half a mile, the road has been well ditched and graded.

Road No. 3.—Township of Kendall:

Situate between Lots 24 and 25 across Concessions 11 and 12, 1½ miles. The road was cut, grubbed, and burnt ready for grading with the exception of a few chains on Concession 12.

Road No. 4.—Township of Kendall:

Situate between Lots 12 and 13 across Concessions 7, 8, 9, 10 and part of 11, 3' 1-3 miles. The road was cut, grubbed and burnt ready for grading.

Road No. 5.—Front St. Extension, Townships of Kendall and Way:

Front St., in the Town of Hearst, was produced westerly along the southerly limit of the Transcontinental Railway Company's station grounds to the Algoma Central Railway right-of-way 1½ miles. The road was cut out and burned in 1912. In 1913 it was well ditched and graded.

Road No. 6 .- Township of Kendall:

Situate between Concessions 10 and 11, across Lots 22, 23 and 24, 3/4 of a mile. The road was cut out, grubbed and burnt, ready for grading.

Road No. 7 .- Township of Kendall:

North Boundary of Kendall, through Lots 13 to 29, both inclusive, 5.2 miles The road was cut out, well grubbed and burning completed with the exception of Lots 18 to 27.

Road No. 8:

Trunk road along Transcontinental Railway, north side, from the east end of the Transcontinental Railway Company's station grounds at Hearst east to the east boundary of the township of Kendall, eight miles. The road was cut out the usual width, 66 ft. The west 2 6/10 miles has been grubbed and burned off and the balance has been burnt over but not grubbed.

Besides the above roads, part of 9th Street and part of 10th Street in the town plot of Hearst were stumped and graded about half a mile. Part of Front Street about half a mile was graded.

It was found when cutting out and grading the roads in the vicinity of Hearst that little or no difficulty was met with in getting sufficient drainage, although in places the ground was level and inclined to be semi-muskeg. In the higher land the soil is first class clay loam. No sand or gravel was met with. The roads as cut out will allow settlers who have taken up lands in the town-

ships adjacent to the town plot an opportunity of reaching the station. All roads cut out will make first class winter roads. The road between the town of Hearst and the Algoma Central Railway is in good condition for both summer and winter traffic.

It was found necessary to construct a small office and storehouse combined for the storing of supplies and machinery. The building was constructed on the Lots 142 to 149 on George Street, west of 11th Street, owned by the Department. The lots were well stumped as a protection against fire, before the building was erected.

GENERAL DESCRIPTION OF ROADS CONSTRUCTED AND IMPROVED IN 1913 IN THE DISTRICT OF TEMISKAMING, ALONG THE LINE OF THE GRAND TRUNK PACIFIC AND THE TEMISKAMING AND NORTHERN ONTARIO RAILWAYS.

(All roads cut out the full width 66 feet and the centre 32 feet grubbed ready for grading and ditching.)

Total number of miles	of road under	construction	190
Number of miles of bu	ush road cut of	ut	138
Amount expended			\$230,704.37

Road No. 1.—Township of Bradburn:

Situate along the north boundary of the above township on the Grand Trunk Pacific Railway, commencing at Lot 7 and extending west across part of Lot 7 and all of Lots 8, 9, 10, 11 and 12, 1.75 miles. Road cut 66 feet wide, the centre 32 feet well grubbed and all the timber and brush burned off.

Road No. 2.—Township of Bradburn:

Situate between Lots 12 and 13, across Concessions 7, 8, 9, 10, 11 and 12, 4.7 miles. Road was cut and grubbed and burning completed with the exception of 75 chains on Concession 8.

Road No. 3 .- Township of Bradburn:

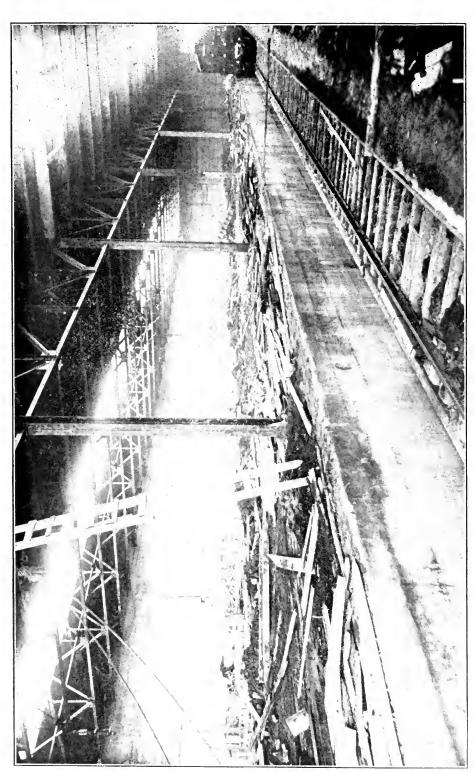
Situate between Concessions 6 and 7, across Lots 1 to 22 to the Mattagami River, 6.73 miles. Road cut and grubbed but not burnt.

Road No. 4.—Township of Calder:

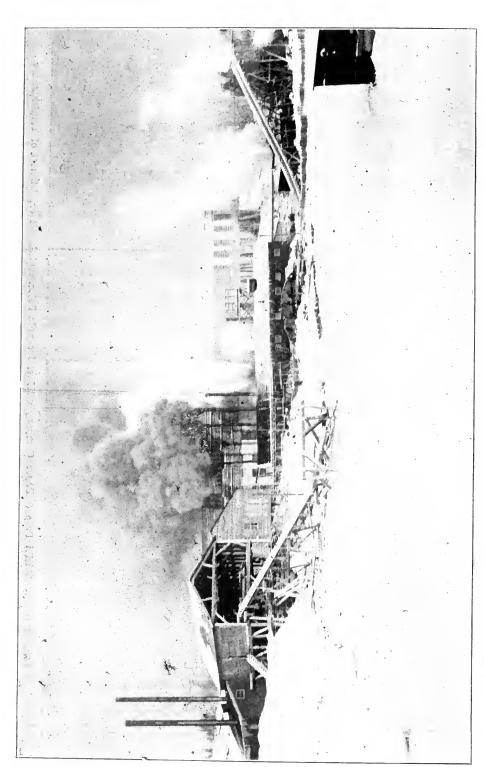
Situate along west boundary across Concessions 1 to 12 inclusive, 9 miles. Eight miles of the road has been cut and grubbed. The burning has yet to be done for over 6½ miles.

Road No. 5 .- Township of Calder:

Situate along the north boundary across part of Lot 4 and all of Lots 5 to 28, both inclusive, 7.76 miles. Road cut and burned off.



Interior of the Abitibi Pulp & Paper Company's Mills, Iroquois Falls, Abitibi River, District of Temiskaming.



Saw Mill, Wood Room and Contracting Plant of the Abitibi Pulp & Paper Company at Iroquois Falls, Abitibi River,

Road No. 6.—Township of Colquhoun:

Situate between Concessions 6 and 7, across Lots 13 to 28, both inclusive, 5.06 miles. Road cut, grubbed and burned with the exception of part of Lots 18, 19, 20 and 21.

Road No. 7.—Township of Colquboun:

Situate between Lots 12 and 13 across Concessions 1 to 6, both inclusive, 4½ miles. Road cut, grubbed and all timber and brush burned off.



Trunk Road north of Cochrane, between Lots 18 and 19, Glackmeyer.

Road No. 8.—Township of Calder:

Situate between Lots 12 and 13 across Concessions 1 to 12, both inclusive. This road was cut last season (1912), but owing to the wet season it was impossible to complete the burning or grubbing. The burning was completed this season (1913) but there is yet some grubbing to be done on Concessions 3 and 4. This season 3.11 miles were well ditched and graded between Concessions 4 and 10.

Road No. 9 .- Township of Calder:

Situate between Concessions 6 and 7 aeross Lots 1 to 28, both inclusive. This road was cut out last season (1912) aeross Lots 1 to 28, but the burning or grubbing was not all done. This season the burning was completed. Across part Lots 13, 14, 15, 16, 17, 24 and 25 the road was well ditched and graded.

Road No. 10 .- Township of Clute:

Situate along the west boundary across Concessions 1 to 10. Last season (1912) this road was cut, but owing to the wet season the grubbing and burning was not completed. This season the burning and the grubbing was completed and also the road cut across part of Concession 2 and all of Concession 1, 1.43 miles, grubbed and all brush and timber burned off. All the culverts required were constructed across Concessions 1 to 6, both inclusive, and the bridge over Deception Creek on Concession 5 was rebuilt. The old bridge was carried away by the spring freshet 1913. The road was then ditched and graded across Concessions 1 to 6. Concessions 7, 8 and 9 are now ready for ditching and grading.



A Typical View of the Clay Lands in the Abitibi Valley, looking east across the Townships of Brower and Fox.

Road No. 11 .- Township of Clute:

Situate along the south boundary across Lots 1 to 19 both inclusive, and Lots 23 to 28 both inclusive, 7.78 miles. This road, with the exception of Lots 23 to 28 both inclusive, was cut last season (1912) but not all burned or grubbed. This year, last season's work was all burned over, and the road well grubbed across Lots 1 to Frederick House River. 1½ miles of corduroy was laid across part Lots 1 to 7 and a bridge built over creek on Lot 6; 1.77 miles across parts of Lots 1 to 6 were well ditched and graded. The balance of the road to the Frederick House River is ready for ditching. This year the road was also cut across Lots 23 to 28 both inclusive, well grubbed and all brush and timber burned off. Lots 28, to the west side of the Buskego River, were then well ditched and graded.

Road No. 12.—Township of Clute:

Situate between Concessions 2 and 3 across Lots 1 to 7, to the Grand Trunk Pacific Railway, 2.24 miles. This road was cut out this season, partly grubbed and burned over once. It still requires to be graded and two small bridges built. It was cut to serve as a winter road.

Road No. 13.—Township of Clute:

Situate between Concessions 6 and 7 across Lots 1 to 28 both inclusive, nine miles. This road was all cut out last season (1912), but was not all burned or grubbed. Across Lots 1 to Frederick House River was partly graded last season (1912). This season, however, it was found necessary to deepen the ditch 2.68



On the Town Line between Glackmeyer and Lamarche, east of Cochrane, showing how Clay Roads are rutted during the wet season.

miles from the Frederick House River, west across Lots 10 to 28 was all burned off, and the road well ditched and graded from the river west across Lots 10 to 26 inclusive. Lots 27 and 28 have yet to be ditched and one small bridge to be constructed on Lot 27.

Road No. 14.--Township of Clute:

Situate between Concessions 8 and 9 across Lots 1 to 5 and part of 6 and zeross Lot 28, a distance of 1.95 miles. This road was cut this year, well grubbed and the burning completed across Lots 1 to 3. No grading done.

Road No. 15.—Township of Clute:

Situate between Lots 18 and 19, across Concessions 1 to 12, both inclusive, nine miles. This road was all cut last season (1912), but was not all grubbed or

burned. This year it was burned across Concessions 1 to 4 to the Grand Trunk Pacific Railway and across Concessions 7 to 10, in all 5.50 miles. Concession 7 was well grubbed but not graded.

Road No. 16.—Township of Clute:

Situate between Lots 12 and 13 across Concessions 1 to 8, six miles. Across Concessions 1, 2 and part of 3 to the Grand Trunk Pacific Railway, 1.93 miles was cut out this season but was not grubbed. This latter section was also burned off. From the Grand Trunk Pacific Railway north across part of Concession 4



Mr. Frank Moberly's Cabbage Garden, north of Abitibi Lake, near the Quebec Boundary.

and all of Concessions 5 and 6 the road had been partly built three years ago by the Colonization Road Branch. This season it was all gone over, re-ditched and several new culverts put in. A new bridge 100 ft. long was built in place of a temporary one across the Buskego River, the old one having been carried away by the spring freshets. From the Buskego River north across part of Concession 6 the road was well ditched and across Concessions 7 and 8 well grubbed ready for ditching.

Road No. 17 .- Township of Leitch:

Situate between Concessions 6 and 7 across Lots 1 to 6, 2.07 miles. This road was cut this year, grubbed and burning completed except a few chains on Lots 5 and 6. No grading was done. Three small bridges will be required to be built.

Road No. 18.—Township of Leitch:

Situate along the south boundary across Lots 1 to 10 to the Frederick House River, 2.91 miles. This road was cut last season (1912), but the grubbing and burning was not completed. This year Lots 1, 2, 3 and part of Lot 4, in all 1.12 miles, were burned over. Across part of Lot 1, 22.10 chains were graded.



Another view of Mr. Frank Moberly's Farm.

Road No. 19 .- Township of Blount:

Situate along the west boundary across Concessions 1 to 10, 7.50 miles. Across Concessions 1 to 4, three miles, the road was cut last season (1912) but was not all burned. This season Concessions 1 to 4 were burned off, and the road cut, grubbed and burned across Concessions 5 and 6, 1.50 miles. Concessions 7 to 10 were cut, but only partly grubbed and burned. The road across Concessions 1 to 6 was well ditched and graded for 4.50 miles.

Road No. 20.—Township of Blount:

Situate along the south boundary from the west side of Lake Dora west across 15 to 28, 4.54 miles. This road was all cut last season (1912) but the burning and grubbing had not been completed. This season the road was all graded and a bridge built over Lillabelle Creek, Lot 25.

Road No. 21.—Township of Blount:

Situate between Concessions 6 and 7 across part of Lot 28, 10 chains. This road was cut this season but not burned or grubbed.



A Road through a Spruce Swamp, east of Cochrane Clay Belt.

Road No. 22.—Township of Blount:

Situate between Lots 18 and 19, across Concession 1 and part of Concession 2 to the Abitibi River, 1.30 miles. This road was cut last season (1912) and this season the road was all graded.

Road No. 23.—Township of Glackmeyer:

Situate along the west boundary for nine miles. This road was cut last season (1912) and partly graded, but owing to the wet weather was not all burned off. This year the remainder of the road has all been burned off. From the Grand Trunk Pacific Railway north across part of Concession 2 and all of Concessions 3 to 6 the grade was widened from 24 to 30 feet and ditches deepened throughout. A new bridge was built across creek on Concession 7 and several new culverts put in.

Road No. 24.—Township of Glackmeyer:

Situate between Lots 24 and 25 across Concessions 2, 3, and 4, 2.25 miles. This road was partly built three years ago and was in need of repair. This season Concession 2 was all reditched and graded for a distance of 60 chains.

Road No. 25 .- Township of Glackmeyer:

Situate between Lots 18 and 19 across Concessions 1 to 12, both inclusive, nine miles. This road was built four years ago and was in need of repair. This season 30 chains across Concession 2 were regraded. A large sand hill on Concession 4 cut down and corduroy relaid on Concession 5, the old corduroy having



A Settler's Home on the Trunk Road six miles east of Cochrane, overlooking the Valley of the Abitibi, North Boundary of Brower.

been burned during the dry spell in July, 1913. Clay was then drawn and spread over this corduroy. Across Concessions 6 to 12 the road bed was widened from 24 to 30 ft. and the whole road across Concessions 1 to 12, both inclusive, regraded. Across Concessions 7 to 12 required burning. This was partly done this season.

Road No. 26.—Township of Glackmeyer:

Situate between lots 12 and 13 across Concessions 1 to 6, 4.50 miles. This road was cut last season (1912) but was not burned. Last winter two pile bridges, 75 and 100 ft. in length, were built on Brule or Brower Creek crossing this road, one on Concession 2 the other on Concession 6. This latter bridge was damaged by high water this spring and was repaired. This season the road was all burned off and well grubbed. All the culverts necessary were then put in and the road was all ditched and graded.

Road No. 27.—Township of Glackmeyer:

Situate along the south boundary 7.43 miles to the Abitibi River. This road was cut last season (1912) and partly graded, but little or no burning had been done. Last winter a pile bridge 50 ft. long was built over Brule Creek on Lot 11. This season the road was all burned off. The grubbing was done and 5,300 feet of corduroy laid across part of Lots 14 to 17. The whole road was then ditched and graded. During the dry weather in July ten chains of corduroy were burned across Lot 23. In place of relaying the corduroy, clay was drawn and used for grading.

Road No. 28.—Township of Glackmeyer:

Situate between Concessions 1 and 2, across Lots 19, 20, 21 and part of Lot 22, to intersect 9th Ave., Town of Cochrane, a distance of 1.12 miles. This road was cut out, well graded and ditched.



Headquarters of the Northern Development Branch at Ground Hog River, Transcontinental Railway. Showing Vegetable Garden.

Road No. 29.—Township of Glackmeyer:

Situate between Concessions 2 and 3 across Lots 1 to 28, both inclusive, nine miles. Part of this road across Lots 7 to 21, inclusive, had been cut, and across Lots 14 to 28 both inclusive, partly graded, by the Colonization Road Branch two years ago. This season the road was cut, grubbed and burned off across Lots 1 to 6, 1.88 miles, and across Lots 25 to 28, a distance of 1.32 miles. Lots 7 to 13, both inclusive, were grubbed. Lots 4 to 13 were ditched and graded. The bridge over Brule Creek, damaged by high water, was repaired. Lots 14 to 15 were ditched. Lots 19 to 21, both inclusive, were grubbed, and Lots 22 to 28, both inclusive, cut out, grubbed and all timber burned off. Bridges were built on Lot 11 and 22, and 60 chains of corduroy laid on Lots 25 to 27. From Lots 19 to 28, both inclusive, the road was then ditched and graded. Across Lot 7, ten chains of cross-lay were laid.

Road No. 30.—Township of Glackmeyer:

Situate between Concessions 4 and 5, from Abitibi River, west across to Lot 21 to the east side of Lillabelle Lake, 6.05 miles. Part of this road was cut four years ago from Lot 15 to Lillabelle Lake. This season the cutting was continued to the Abitibi River across Lots 14 to 2, 3.87 miles, grubbed and brush and timber burned off. The read was also well ditched and graded across Lots 6 to 18 and a bridge built over creek on Lot 11, and 70 chains of small corduroy laid across part Lots 9 to 11.

Road No. 31.—Township of Glackmeyer:

Situate between Concessions 6 and 7 from the Abitibi River, east of Lot 4, west across Lots 4 to 28 inclusive, eight miles. This road was all cut last season (1912) but was not all burned or grubbed. This season the road was all graded and burned off. The bridges on Lots 11, 12 and 23 had to be repaired, having been damaged by spring floods.



Vegetables at the Ground Hog River, old Headquarters of Fauquier Bros., Railway Contractors, Transcontinental Railway, July 15th.

Road No. 32.—Township of Glackmeyer:

Situate between Concessions 8 and 9 across Lots 19 to 28, 3.23 miles. Road cut, well grubbed and all brush and timber burned off.

Road No. 33.—Township of Glackmeyer:

Situate between Concessions 10 and 11 across Lots 13 to 19, both inclusive, 2.21 miles. This road was completed this season, with the exception of two culverts on Lot 13 and some burning on Lots 13, 14, and 15.

Road No. 34, Township of Kennedy:

Situate along the west boundary from the Abitibi River north across part of Concession 3 and all of 4 and 5 and part of 6, 1.70 miles. This road was cut this season, grubbed and the burning partly done.

Road No. 35 .-- Township of Kennedy:

Situate between Lots 23 and 25 across Concessions 1 to 4, three miles. This road was cut last season (1912) but was not burned. This season it was all burned off.

Road No. 36 .- Township of Kennedy:

Situate between Lots 12 and 13 across Concessions 1 to 8, both inclusive, six miles. This road was cut this season, well grubbed and the burning completed with the exception of Concessions 7 and 8.

Road No. 37 .- Township of Kennedy:

Situate along the south boundary across Lots 13 to 28, both inclusive, 3.80 miles. Part of this road was cut out last season (1912), but no burning or grading



Saw Mill and Rossing Plant of the New Ontario Colonization Co. on the Mattagami River, Township of Kendrey.

was done with the exception of Lot 28 and part of Lot 27 west of the Abitibi River, a distance of 44.05 chains. This piece was partly graded in 1912 and repaired this season. The burning east of the Abitibi River from Lots 13 to 26 inclusive, 3.56 miles, was done this season. The road across part of Lot 15 and all of Lots 14 and 13, 54.83 chains, was cut, and all timber and brush burned off. From the junction of the road, between Lots 2 and 3, township of Brower, to the west bank of the Abitibi River, 1.05 miles was well ditched and graded and the hill on east bank of river cut down.

Road No. 38 .- Township of Kennedy:

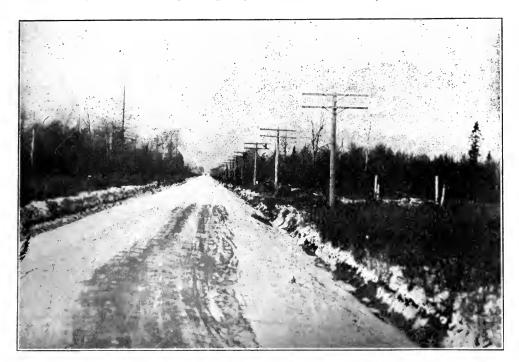
Situate between Concessions 4 and 5, across Lots 25 to 28, 1.14 miles. This road was cut, grubbed and the burning completed, with the exception of Lot 27.

Road No. 39.—Township of Kennedy:

Situate between Concessions 6 and 7, across Lots 1 to 16, both inclusive, five miles. This road was cut, well grubbed and most of the burning completed.

Road No. 40.—Township of Lamarche:

Situate between Lots 8 and 9, across Concessions 1 to 6, six miles. Part of this road was built last season (1912). All of Concession 6 was ditched and part of Concession 4, and the road cut south across half of Concession 2, but little or no burning had been done. This season the burning was completed over last year's work (1912). A pile bridge, single span, was built over creek on Concession 4.



View of the Macadamized Road east of Sault Ste Marie, on the Sudbury and Sault Ste.

Marie Trunk Road.

The cutting was extended this season across Concession 1 and half of Concession 2, 1½ miles. This road was cut, grubbed and the burning almost completed. The road is now ditched and graded across Concessions 3 to 6, and 20 chains across Concession 2.

Road No. 41.—Township of Lamarche:

Situate between Lots 6 and 7, across Concessions 2 to 5, and part of 1, 43/4 miles. This road was cut, grubbed and the burning nearly all completed. The road has been well ditched and graded across Concessions 3 to 5.

Road No. 42.—Township of Lamarche:

Situate between Concessions 1 and 2, across Lots 1 to 4 inclusive, and part of 5 to the east side of lake, 21/4 miles. This road was cut, the first mile through a very heavy windfall, grubbed, but not burned.

Road No. 43 .- Township of Lamarche:

Situate between Concessions 3 and 4, across Lots 1 to 6, 3 miles. Across Lot 1 and Part of Lot 2, in all 66 chains, the road was well ditched and graded. The balance of this road is cut out, grubbed, but the burning is not all done. From where the road crosses the Temiskaming and Northern Ontario Railway a road 30 ft. wide, well grubbed, was cut on each side of the track south to the railway station, a distance of 10 chains.

Road No. 44 .- Township of Lamarche:

Situate between Concessions 5 and 6, across Lots 7 and 8, in all one mile. This road was cut out and graded.



Sudbury and Sault Ste. Marie Trunk Road Crossing Root River, close to the Canadian Pacific Railway.

Road No. 45 .- Township of Brower:

Situate along the west boundary from the Temiskaming & Northern Ontario Railway, north across Concessions 2 to 6, in all 4¾ miles. This road was cut last season (1912) but was not burned. This season it was all burned off and graded. A pile bridge was built over Brule Creek, Concession 6.

Road No. 46.—Township of Brower:

Situate between Lots 2 and 3, across Concessions 3 to 6, four miles. This road was cut and partly graded last season (1912). This season the road has been completed and a bridge built on Concession 6.

Road No. 47.—Township of Brower:

Situate along the south boundary, in all 5½ miles. This road was cut last season (1912) but was not burned off. This year part of Lot 12 and all of Lots 2 to 8 were burned, in all 3¾ miles.

Road No. 48.—Township of Brower:

Situate between Concessions 3 and 4, from Lot 1 to the Grand Trunk Pacific Railway 1¼ miles, and across Lots 6 to 12, 3½ miles. This road was cut this season, grubbed and burning completed over Lots 1, 2, and part of 3, 11 and 12. Lots 11 and 12 (1 mile) were well ditched and graded.



A Settler and Local Mill Owner, Mr. Genier, on Lot 19, Concession 11, Glackmeyer, 81/2 miles north-east of Cochrane.

Road No. 49.—Township of Brower:

Situate between Concessions 2 and 3, across Lots 1 and 2, in all one mile. This road was cut last season (1912) but not burned. This year it was burned and graded.

Road No. 50.—Township of Fox:

Situate along the west boundary across Concessions 1 and 2, in all 2 miles. This road was cut last season (1912) but not burned. This season Concession 2 was burned off.

Road No. 51.—Township of Fox:

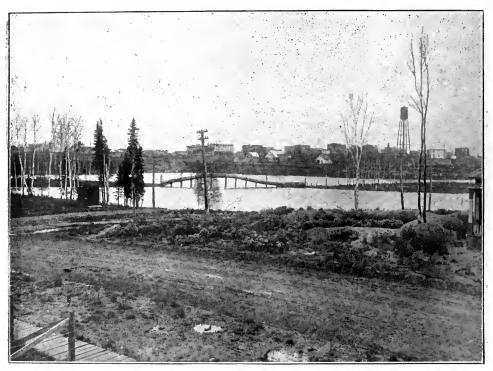
Situate between Lots 6 and 7, across Concessions 2 and 3, to the Grand Trunk Pacific Railway, a distance of 1½ miles. This road was cut and grubbed this season, but not burned.

Road No. 52.—Township of Fox:

Situate along the south boundary across Lots 12 and 11, one mile. This road was cut last season (1912), but was not burned. This season this road was burned off.

Road No. 53.—Township of Fox:

Situate between Concessions 3 and 4, across Lots 2 to 11, a distance of 51/4 miles. This road was cut, well grubbed and most of the timber and brush burned off. There remains a little burning to be done on Lots 2 to 7.



Town of Cochrane at the Junction of the Temiskaming and Northern Ontario and Grand Trunk Pacific Railways.

Road No. 54 .- Township of Sargent:

Situate along the north side of the Grand Trunk Pacific Railway, across Lots 1 to 34, both inclusive, a distance of 10.91 miles. Part of this road, lots 14 to 34 inclusive, 6.58 miles, was cut season of 1912, but not burned off. This season the burning was completed over last season's work and the road cut, well grubbed and the burning completed across Lots 1 to 12 inclusive and to the Quebec boundary, a distance of 2.33 miles. The road is now nearly all ready for ditching and grading.

Road No. 55.—Township of Sargent:

Situate between Lots 4 and 5 across Concessions 5, 6 and 7, 2.35 miles. This road was cut, well grubbed and most of the burning completed and is now ready for grading, except part of Concession 5.

Road No. 56.—Township of Calvert:

Situate along the Temiskaming & Northern Ontario Railway spur from Porquois Junction (Iroquois Falls) into the Abitibi River Pulp and Paper Mills at Iroquois Falls, 6.36 miles. This work was done this season. The road commences on the north boundary of the Township of Clergue and extends north between Lots 9 and 10, Township of Calvert, to the Temiskaming and Northern Ontario Spur to the Abitibi River. It then parallels the railway on the south-east side for a little over five miles, then crosses the railway and follows the north-west side into the Pulp Company's yards and townsite. This road was cut out, corduroyed, ditched and graded; 6 bridges were constructed and 14,970 feet of corduroy laid.



A Typical View of the White Birch and Poplar Lands in the Valley of the Abitibi, Township of Brower.

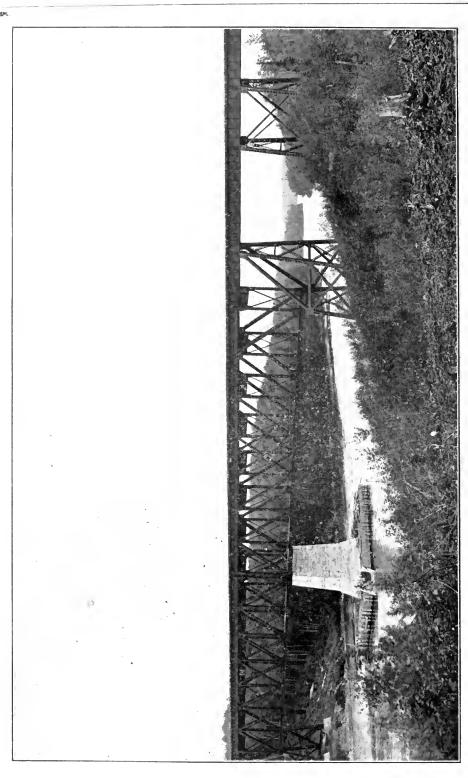
Road No. 57.—Township of Clergue:

Situate along the north boundary across Lots 1 to 12, both inclusive, six miles. This road was cut season 1912, but was not burned off. This season the burning and grubbing were completed over Lots 5 to 12, and the road well ditched and graded across Lots 7 to 12 and part of 5 and 6, a distance of $3\frac{1}{2}$ miles. A pile bridge was built over creek on Lot 9.

Road No. 58.—Township of Clergue:

Situate midway on Lot 10, Concession 6, from road between Lots 10 and 11 to Temiskaming and Northern Ontario Railway station at Porquois Junction, a distance of 20 chains. This road was cut but not all grubbed or burned.

Banks of the Abitibi River at the Grand Trunk Pacific Railway Crossing.



Road No. 59 .- Township of Clergue:

Situate between Concessions 3 and 4, across Lots 1 to 10, five miles. This road was cut last season (1912) but not burned of. This year the burning was completed across Lots 1 to 9, both inclusive, $4\frac{1}{2}$ miles, and the road was well ditched and graded across part of Lot 3 and all of Lots 4 to 8 and part of 9, 3.12 miles. A pile bridge was built over Meadow Creek on Lot 7.

Road No. 60.—Township of Clergue:

Situate between Lots 6 and 7, across part of Concession 1, all of Concessions 2 to 5 and part of 6. This road was all cut season 1912 but not burned off. It was also partly graded across Concession 4. This season the burning was all completed and the road well ditched and graded across Concessions 2 and 3, two miles A pile bridge was built over Meadow Creek. Concession 5.



A Trunk Road one mile north-east of the Town of Cochrane, showing the Taylor Farm.

Road No. 61.—Township of Clergue:

Situate along the east boundary across Concessions 4 to 6, three miles. This road was cut last season (1912) across Concession 4 and 55 chains of Concession 5, but no burning had been done. This season it was all burned and the road cut north across Concession 6 and grubbed, but the burning was not all completed.

Road No. 62.—Township of Clergue:

Situate along the cast side of the Temiskaming and Northern Ontario Railway from Porquois Junction south to mile post 220, 3½ miles. This road was cut, grubbed and most of the burning completed; 1¼ miles of ditching was done on this road and ¼ mile of corduroy laid. A pile bridge was built over creek on Lot 9.

Road No. 63.—Township of Dundonald:

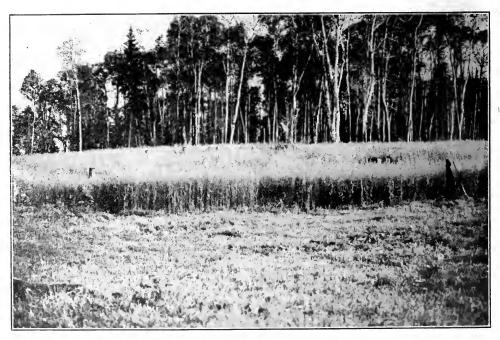
Situate along the north boundary, for 5½ miles. This road was cut last season (1912) but was not burned. This season the road was burnt off and Lot 1, one half mile, was well grubbed and graded.

Road No. 64.—Township of Matheson:

Situate between Lots 6 and 7, across Concessions 1 to 6, both inclusive, six miles. This road was cut this season and the burning nearly completed.

Road. No. 65 .- Township of Matheson:

Situate between Concessions 3 and 4, across Lots 1 to 10, both inclusive, in all 5 miles. This road was cut this season, grubbed and the burning nearly completed.



Field of Oats, north of Cochrane, Township of Glackmeyer.

Road No. 66.—Townships of Machin and Fauquier:

Situate along the north side of the Grand Trunk Pacific Railway from the Ground Hog River west for 4¾ miles through the townships of Machin and Fauquier. This road was cut, well grubbed and all burned off, ready for grading.

Road No. 67.—

Situate between the town of South Porcupine and McArthur Lake, in the township of McArthur, a distance of twenty miles. About three miles of this road was partly cut out two years ago by the Colonization Road Branch. The old road was widened and repaired and the road continued to the lake. The last or south six miles was cut 20 feet wide, but suitable as winter road only. The balance of the road is well grubbed and all low places corduroved. Bad hills were

cut down and the road fairly well graded. Four bridges were built. The road was constructed for the benefit of mine owners operating in the townships of Tisdale, Whitney, Delora, Shaw, Adams, Eldorado and McArthur, through which this road passes.

Road No. 68.—Town of Cochrane:

In order to reach the Union Station in the town of Cochrane, it was necessary to grade certain streets which had been laid out but not improved by the municipality.

Fourth Street was produced east to the line between Lots 18 and 19, township of Glackmeyer, from Eleventh Avenue, 1,660 feet.

The main Trunk Road from east and north-east enters the town by Fourth Street, thence north along Eleventh Avenue to Fifth Street, 600 feet; thence west



Garden at the Ground Hog River, Headquarters Fauquier Brothers, Contractors, Transcontinental Railway, July 15th.

along Fifth Street to the Lake Shore Road; thence following the Lake Shore Road along the north shore of Commando Lake to Sixth Avenue, 1,800 feet.

In order to get an outlet to the townships to the north-western part of the town of Cochrane, part of Third Avenue, part of Seventh Street, and part of Second Avenue had to be graded: in all a distance of 1,600 feet. Four hundred yards of gravel was used in re-surfacing the Lake Shore along the Commando Lake.

No. 69.

The Driftwood River, a tributary of the Black River, flowing through the townships of Walker, part of Clergue, Taylor and Stock, was cleared of driftwood so as to enable the settlers in these townships to navigate the river in the summer season in small boats and to enable them also to drive their pulpwood to the Abitibi Pulp Mills at Iroquois Falls on the Abitibi River. The river, as its name implies, was full of driftwood at several points, log jams having been formed through which it was impossible to drive logs or navigate boats.

ROADS IN THE DISTRICT OF TEMISKAMING, EAST AND WEST ALONG THE TEMISKAMING AND NORTHERN ONTARIO RAILWAY, FROM EARLTON NORTH TO MONTEITH.

Number of miles constructed, graded and old roads improved—150.

Amount expended \$185,612.61

Township of Walker:

Line between Concessions 1 and 2 across Lots 3 to 10 inclusive and between Lots 10 and 11, across the south half of Concession 2, and across the centre parts of Lots 11 and 12; 5½ miles. The road was cut out and burned and 3½ miles graded.

Townships of Walker and Clergue:

Town line between Walker and Clergue. This road was cut out and partly graded last season; this season the road was burned off and 23/4 miles of the grading completed.

Townships of Taylor and Walker:

Town line between Taylor and Walker, across Lots 5 to 12, both inclusive, and across part of Lot 1 to the Driftwood River, between Stock and Clergue; also road between Lots 8 and 9, Concession 1, Walker, and between 8 and 9, north part of Concession 6, Taylor; 51/4 miles. The road was cut out and grubbed and burned.

Townships of Taylor and Stock:

Line between Concessions 5 and 6 from Lot 1, Taylor, to Lot 5, Stock, 8½ miles. The road was cut out and burned. The road was graded from Lot 8 to 12, Taylor, both inclusive. The road between Lots 8 and 9, across the south part of Concession 6, half a mile was ditched.

Township of Taylor:

Line between Concessions 2 and 3, across Lots 1 to 7, both inclusive, 3½ miles. The road was cut out and grubbed and 2½ miles burned.

Line between Lots 4 and 5, across Concession 3 and part of Concession 2, 13/4 miles. The road was cut out.

Road between Concessions 4 and 5, across Lots 2, 3, 4 and 5, two miles. The road was cut out and graded. Also road between Concessions 4 and 5, across Lots 7, 8, 9, 10 and part of 11, to the Driftwood River. The road was cut out and grubbed and half a mile graded. Also road between Lots 8 and 9, across Concession 5; cut out, grubbed and burned. A bridge 108 ft. in length was constructed across the Driftwood River on line between Concessions 5 and 6, Lot 1, Stock; also a bridge between Concessions 4 and 5, Lot 11, Twp. of Taylor.

Townships of Taylor and Currie:

Town line between Taylor and Currie, across Lots 7 to 12 inclusive. Graded three miles.

Townships of Carr and Taylor:

Town line between Carr and Taylor, across Concessions 1 and 2, two miles. The road was cut out, 1½ miles of which was graded.

Township of Carr:

Line between Concessions 2 and 3 across Lots 1 to 8. Cut and graded four miles.

Line between Lots 4 and 5, across Concessions 1, 2, 3, 4 and part of 5, 4½ miles. The first 3½ miles were cut out and graded, and the last mile cut and grubbed only.

Townships of Carr and Beatty:

Town line between Carr and Beatty, across Concessions 1, 2, 3 and part of 4, 3½ miles. The road was cut out last season but not burned. This season the road was burned off and graded 3½ miles.

Township of Bowman:

Line between Lots 6 and 7, across Concessions 4, 5 and 6, three miles. The road was cut out and grubbed, and $1\frac{1}{2}$ miles graded. Also road between Concessions 3 and 4, across Lot 7, $\frac{1}{2}$ a mile; also road between Concessions 4 and 5, across Lots 7 and 8, 1 mile; also road between Concessions 5 and 6, across Lots 7 and 8, one mile. The roads were cut out, grubbed and burned.

Line between Lots 4 and 5, across Concessions 4 and 5; also road between Concessions 3 and 4, across Lot 4 and half of Lot 3, a total distance of 23/4 miles. The road was cut out and grubbed.

Townships of Bowman and Currie:

Town line between Bowman and Currie, across Concessions 6 and 5. The road which was cut out last season was burned off and graded this season; also a truss bridge 55 feet span was built over the Wahtaybeg River on Concession 5.

Township of Hislop:

On the town line between Hislop and Bowman. This road was cut in 1912, and this season the timber was burned off across Concessions 4, 3, 2 and 1. Concessions 4, 3 and half of 2 were graded $2\frac{1}{2}$ miles.

The town line between Hislop and Beatty across Lots 6 to 13 inclusive, also town line between Bowman and Carr, across Lots 1, 2 and 3, to the town of Matheson was improved. The road was constructed several years ago, and was widened from 18 feet to 24 feet, and regraded in places covering a distance of six miles.

Road between Lots 11 and 12, Concession 6, one mile, between Concessions 5 and 6, across Lots 9, 10 and 11, 1½ miles; 2½ miles of this road cut and burned, 1½ miles graded

Township of Playfair:

On the north boundary of Playfair a road was cut out in 1912. This season the timber was all burned off for a distance of six miles. Seven culverts were constructed and one bridge with a span of 25 feet partially constructed.

Trunk Road along Temiskaming and Northern Ontario Railway:

Along the Temiskaming and Northern Ontario Railway right-of-way through part of the townships of Taylor and Carr from the line between Concessions 4 and

5, Taylor, to the Town of Matheson, a distance of eight miles; seven miles graded and one mile partly graded. On this section of the road three bridges were constructed with lengths of 120 feet, 40 feet and 20 feet.

From the town of Matheson, through part of the townships of Bowman and Hislop, continuing along the right-of-way of the Temiskaming and Northern Ontario Railway, eight miles. The timber was burned off, four miles graded and three miles re-graded. Thirty-four culverts were constructed and two small pile bridges built, each 20 feet span.

Continuing through the township of Playfair to the town line between Playfair and Cook, five miles. Ten culverts were constructed, timber on the right-of-way was burned off and one-half mile graded. Two 16-foot approaches were built on the east side of bridge constructed in 1912 across the Black River on Lot 4. In July last during the extremely dry season this bridge was burned, not-withstanding the fact that the foreman and his men were on the spot protecting it. In order, however, to save a settler's house and family, they were forced to leave the bridge, and in their absence the bridge was destroyed.

Sesekinika Road:

Commencing at Sesekinika Station on the Temiskaming and Northern Ontario Railway, on Lot 9, Concession 1, township of Maisonville, the road runs northwest along the right-of-way of said railway, crossing the same at the west side, and continuing west across part of Lot 10 and Lot 11, Concession 2, to Lot 12, thence south between Lots 11 and 12 in the said Concession to the line between Concessions 1 and 2, 2½ miles. This road was cut out the full width, stumped, grubbed and burned 30 ft., and one mile graded. Eight culverts and one small bridge were constructed thereon. This road was constructed to allow settlers in the south-west part of Maisonville to reach the railway station.

Kirkland Lake Mining Road:

Commencing at the village of Swastika, on the Temiskaming & Northern Ontario Ry., and running north-east though the township of Teck along the south shore of Kirkland Lake to the Township of Lebel, as far as Tough-Oakes Mines, seven miles. The road was cut out 50 feet wide and graded 26 feet wide. A bridge in the village of Swastika passing under the railway bridge across a tributary of the Blanche River was constructed 66 feet long, and one truss bridge 40 feet span across Trout Creek and 67 culverts were also constructed on this road, together with one mile of cross-lay. The road is well graded, and in places surfaced with gravel. It passes through a rocky country, timbered chiefly with Jack pine, poplar, birch and small spruce; little or no agricultural land is met with along this road. A small mining village has sprung up at Kirkland Lake, and considerable mining operations are being carried on.

Townships of Boston and Lebel:

Commencing on town line between Boston and Otto between Concessions 4 and 5 and running north-west through the townships of Boston and Lebel to the Dane Mining Camp. This was an old winter road cut out about 12 feet, which was improved to 40 feet wide and graded 20 feet wide for a distance of 3½ miles.

Townships of Dack and Robillard:

Widened grade and improved the road on the town line between the townships of Dack and Robillard, across Concessions 5 and 6, and constructed one floating bridge 100 feet in length.

Townships of Dack and Chamberlain:

Town line between Chamberlain and Dack across Lots 5 to 12, both inclusive, four miles. Road cut out and graded.

Township of Chamberlain:

Cut out, grubbed and graded road between Concessions 1 and 2, across Lots 1, 2, 3 and 4. Also road between Lots 2 and 3, across Concessions 3, 2 and north half of Concession 1, a distance of 41/2 miles. This road was all graded with the exception of half a mile between Concessions 1 and 2.

Eight large culverts were constructed on the north boundary of the township

across Lots 1 to 6 and the grades cut down.

- The road on the west boundary of the township was widened, graded and improved, and continuing north between the townships of Pacaud and Marquis to the Blanche River about the centre of Concession 5, a total distance of 101/2 miles.

Township of Savard:

The road between Concessions 1 and 2, across Lots 1, 2, 3 and 4, two miles,

cut out, grubbed and burned, and graded half a mile.

Cut out, grubbed and ready for grading lines between Lots 6 and 7, across Concessions 1 and 2; line between Concessions 2 and 3, across Lots 7 and 8; line between Lots 8 and 9, across Concession 3. Total distance of four miles.

Township of Robillard:

Stumped, grubbed and graded the road between Concessions 4 and 5 from the East town line to Long Lake; five miles; and north-west along the north shore of the said lake to the west town line, one mile. Thence north along the west town line across Concession 6, Robillard, and Concession 1, Savard, two miles cut, grubbed and burned.

Townships of Pacaud and Catherine:

On the town line between Pacaud and Catherine the road was cut out and graded half a mile, part of Concession 3.

Township of Marter:

Constructed culverts and improved and widened the grade on the town line between Marter and Evanturel, across Lots 5 to 10 inclusive; also improved the grades, widened road and re-graded the road between Lots 4 and 5, across Concession 1 and part of Concession 2; also graded road between Concessions 4 and 5, across Lots 1, 2 and half of Lot 3, 11/2 miles; also re-graded road across Concessions 4, 5, and 6, between Lots 4 and 5, three miles; and cut out the town line between Marter and Catherine across Lots 1, 2, 3 and 4, two miles; also burned off timber on road between Concessions 3 and 4, across Lot 4 and half of Lot 3, and on the road passing through the centre of Lot 3, 11/2 miles.

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Road between Lots 10 and 11, across Concessions 1 and 2, graded and improved, two miles; also graded and improved road between Concessions 2 and 3, across Lots 9 and 10, one mile; also graded and improved road between Lots 8 and 9, across Concession 3, one mile; also graded and improved road between Concessions 3 and 4, across Lots 8 to 11 inclusive, two miles; also cut out and stumped road between Lots 8 and 9, across Concessions 4 and 5, two miles.

Township of Evanturel:

Road between Concessions 1 and 2, across Lots 1, 2, 3 and 4, two miles, cut out, burned and grubbed.

Town line between Evanturel and Armstrong, across Lots 1 to 6, both inclusive, three miles; and the town line between Ingram and Hilliard, across Lots 1, 2, 3 and 4 and part of 5 to the Blanche River, 21/4 miles; cut out, grubbed and burned.

Township of Ingram:

Cut out and graded road between Concessions 2 and 3, across Lots 1, 2, 3 and 4, two miles.

Township of Armstrong:

Road between Concessions 5 and 6, across Lots 1, 2, 3, 4 and 5, 2½ miles; cut out and burned.

Earlton and Heaslip Road:

Commencing at the Village of Earlton and running north along the east side of the right-of-way of the Temiskaming and Northern Ontario Railway to the north boundary of the township of Armstrong; thence east along the town line between Armstrong and Evanturel, which road is above described, to the line between Lots 4 and 5, township of Evanturel, and continuing north along the said line across Concessions 1, 2 and 3 to a point on the line between Concessions 3 and 4, Evanturel, half a mile east of the Village of Heaslip, 6 miles in all. The road was cut out and graded.

South Lorrain Road:

From the town of Haileybury a road was partly cut out for a distance of two miles.

J. F. WHITSON,

Road Commissioner.

35,000

60,000

90,000

90,000

THE HON. W. H. HEARST,

Minister of Lands, Forests and Mines.

SIR,—I beg to recommend the expenditure of the following amounts under 2 Geo. V. Chap. 2, on the construction of new roads, repairing and finishing of old roads, the construction of bridges and the clearing of a small farm for experimental purposes in Ground Hog Valley, during the season of 1914.

District of Rainy River.

District of Kenora.

District of Port Arthur.

Re-surfacing trunk roads graded last season, the construction of short roads adjacent to the trunk roads constructed last season, also construction of new roads in and north of the Township of Dorion on the C. P. R....

District West of Fort William.

The extension of the trunk roads begun last season, re-surfacing and gravelling portions of the trunk roads partly constructed last season, including the Pigeon River or International Boundary and Duluth Road, also the construction of a bridge across the Kaministiquia River......

Sudbury and Sault Ste. Marie Trunk Road.

District of Sudbury.

Re-surfacing part of the trunk roads constructed last season in the Blezard and Chelmsford Valleys, construction of new trunk roads through Blezard Valley, the completion and extension of the West Shining Tree Mining Road, the repairing of Long Lake Mining Road

Sudbury and North Bay Trunk Road.

50,000

50,000

North Bay and Mattawa Trunk Road.	•
Re-surfacing part of the old road, the construction of a trunk road from Callander south to Powassan, the construction of a bridge across the Amable du Fond River on the North Bay and Mattawa Road	50,000
Haileybury and South Lorrain.	t 1
Mining and agricultural road in the South Lorrain Mining District and farming section, west of Lake Temiskaming	15,000
Mining road from the Elk Lake Branch of the T. & N. O. to Maple Mountain Mining Section and other mining roads in the vicinity of Elk Lake.	20,000
Completing South Porcupine mining road and other mining roads on the vicinity of Porcupine	20,000
Colonization roads in the vicinity of Long Lake west of Charlton, including three large bridges	35,000
Temiskaming and Northern Ontario Railway.	0 1 1
Roads along the T. & N. O. Ry. from Englehart north to Cochrane and extending west as far as Charlton and Porcupine and east as far as the agricultural land extends, including the construction of a bridge on White River.	120,000
Transcontinental Railway.	
Roads along the Transcontinental Railway from the Quebec boundary west to Hearst, to cover also the construction of ferries across the Abitibi and Frederick-house Rivers, to cover the completion of roads cut out last season, the construction of new roads where settlement has taken place, and the opening up of new roads where immediate settlement is likely to take place	105,000
A proper survey and location of proposed trunk road along the Ottawa River from Mattawa to Pembroke	15,000

Repairing and extending the Larder Lake Mining Road

For clearing small experimental farm in the valley of the Ground Hog River on the Transcontinental Railway, where there is a large area of rich clay soil, this with a view to testing the climatic conditions of that section of the country, to cover also the expense of making additional accurate tests of the soils in the different sections throughout the Clay

Larder Lake Mining Road.

3,000

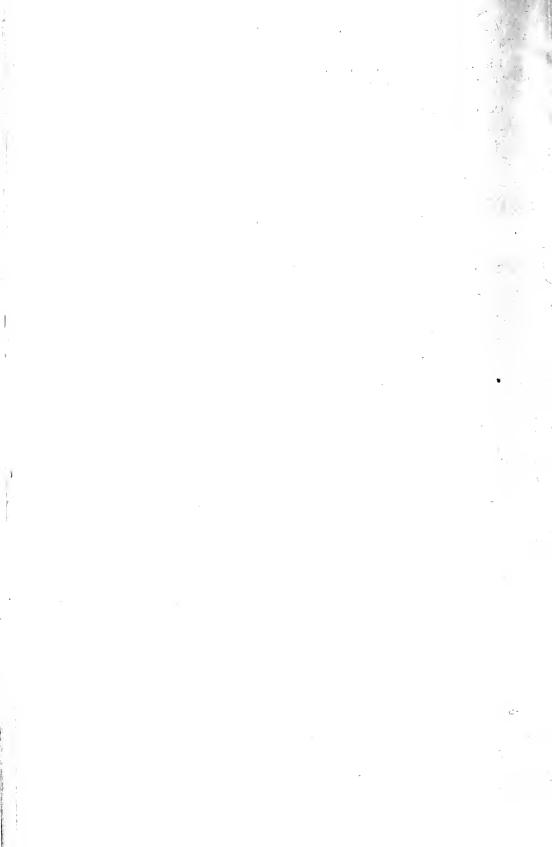
5,000

old	Unforeseen work, exploration and surveys of new roads, renewing of bridges and construction of new roads	77,000
	Office and engineering expenses, equipment and plant	25,000
		\$950,000

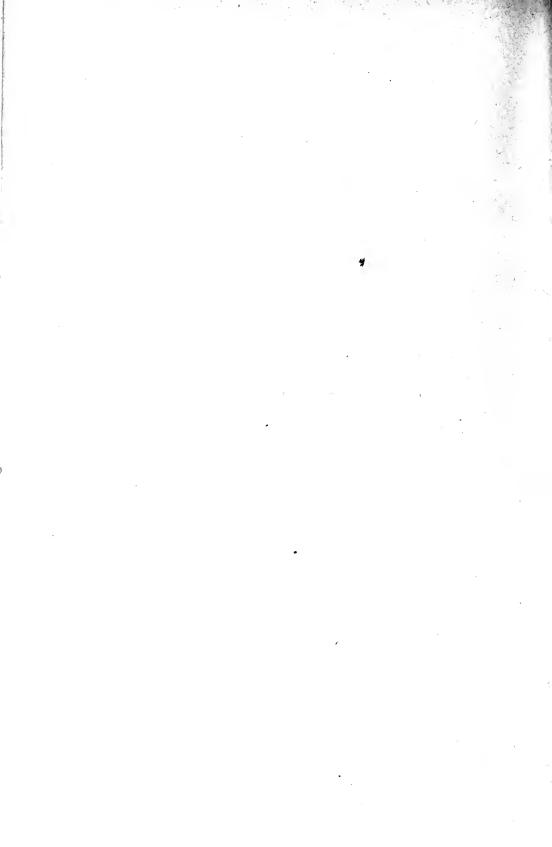
I have the honor to be, Sir,

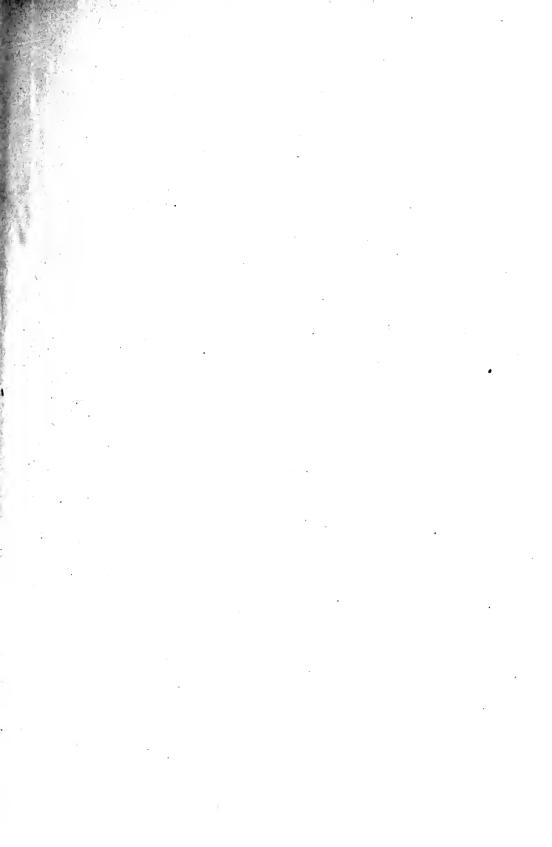
Your obedient servant,

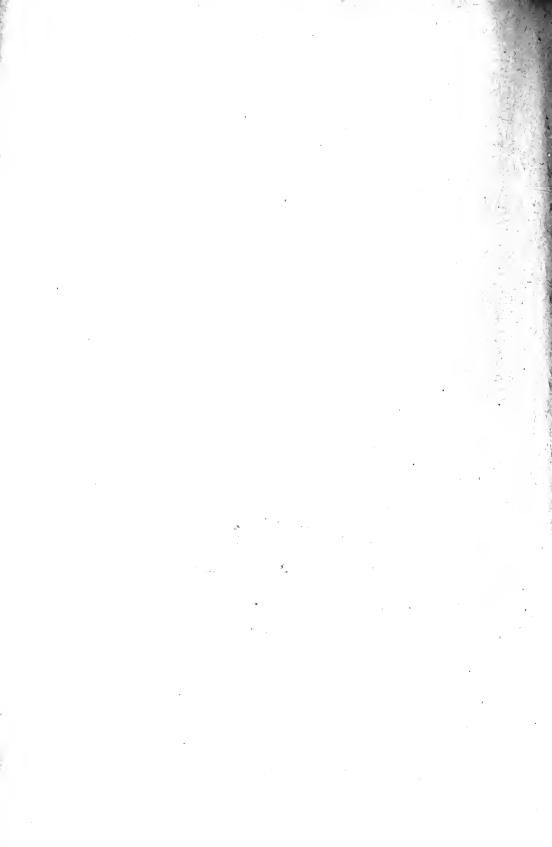
J. F. WHITSON,
Road Commissioner.











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